ON THE IDENTIFICATION OF ZERO VARIABLES IN AN INTERIOR-POINT FRAMEWORK: COMPLETE NUMERICAL RESULTS*

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1. Introduction

In this technical report, we collect the complete numerical results discussed in [1]. Therefore, this paper only consists of tables, in which these results are listed, while their discussion and analysis is entirely presented in [1].

The remaining part of this paper is divided into three sections: Section 2 contains, for each of the 64 `netlib` problems considered, the percentages of misclassified indices at each iteration and for all three indicators discussed in [1], Section 3 contains the corresponding percentages for the correctly identified indices, and Section 4 contains the results for the globally correctly identified indices.

In our tables, the headings have the following meanings:

iter	: iteration number,
Tapia	: Tapia indicator,
New	: new indicator,
Inter	: intersection indicator.

2. Misclassified Indices

Table 2.1: Results for problem `25fv47`

iter	Tapia	New	Inter
1	14.1855	7.6591	5.0701
2	11.3808	9.2233	5.0701
3	9.2772	11.5426	6.0949
4	7.6591	15.6958	7.0119
5	6.4186	25.1888	6.2028
6	11.7044	27.2384	11.0572
7	38.5113	30.2050	22.4380
8	39.2125	34.6818	23.8403
9	29.5038	37.3786	19.2017
10	22.5458	36.8932	15.8576
11	18.3387	33.4412	12.9450
12	12.0280	33.3873	8.6839
13	6.5804	28.4250	4.6386
14	5.2319	24.3797	3.9374
15	2.9126	17.4757	1.9957
16	2.5890	17.3679	1.5642
17	2.3193	12.0820	1.4563
18	1.5102	8.3064	0.8630
19	0.8091	5.3398	0.5394
20	0.2697	4.3689	0.2157
21	0.1079	2.8587	0.1079
22	0.0539	1.6181	0.0539
23	0.0000	0.7551	0.0000
24	0.0000	0.1079	0.0000
25	0.0000	0.0000	0.0000

Table 2.2: Results for problem `adlittle`

iter	Tapia	New	Inter
1	18.9781	33.5766	16.7883
2	7.2993	34.3066	3.6496
3	6.5693	26.2774	0.7299
4	6.5693	20.4380	0.7299
5	12.4088	22.6277	3.6496
6	8.7591	24.0876	4.3796
7	5.8394	18.2482	2.9197
8	2.1898	8.0292	1.4599
9	1.4599	3.6496	1.4599
10	0.0000	2.1898	0.0000
11	0.0000	0.0000	0.0000
12	0.0000	0.0000	0.0000

Table 2.3: Results for problem `afiro`

iter	Tapia	New	Inter
1	1.9608	35.2941	0.0000
2	1.9608	47.0588	1.9608
3	11.7647	49.0196	5.8824
4	1.9608	7.8431	1.9608
5	0.0000	3.9216	0.0000
6	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000

Table 2.4: Results for problem `agg`

iter	Tapia	New	Inter
1	58.2114	24.7154	4.0650
2	54.7967	15.6098	1.4634
3	48.2927	11.3821	1.4634
4	26.9919	10.4065	2.1138
5	6.1789	9.9187	2.2764
6	4.2276	10.5691	2.1138
7	2.2764	8.9431	1.3008
8	1.6260	7.1545	0.9756
9	1.3008	5.5285	0.4878
10	2.1138	5.0407	1.1382
11	1.9512	4.5528	0.8130
12	1.4634	3.9024	0.6504
13	0.3252	3.5772	0.3252
14	1.4634	3.4146	0.1626
15	0.3252	2.6016	0.3252
16	0.1626	2.1138	0.1626
17	0.0000	1.1382	0.0000
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000

Table 2.5: Results for problem `agg2`

iter	TAPIA	NEW	INTER
1	56.2005	27.8364	5.9367
2	46.4380	21.2401	0.2639
3	12.2691	21.6359	4.2216
4	6.2005	21.5040	3.6939
5	3.6939	21.6359	3.1662
6	4.4855	16.4908	4.2216
7	8.5752	16.6227	7.6517
8	9.1029	17.0185	8.4433
9	8.3113	15.9631	7.9156
10	4.7493	15.6992	4.7493
11	2.5066	15.5673	2.3747
12	1.3193	15.4354	1.3193
13	0.6596	11.2137	0.6596
14	0.2639	9.1029	0.2639
15	0.0000	4.8813	0.0000
16	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000

Table 2.6: Results for problem `agg3`

iter	TAPIA	NEW	INTER
1	54.7493	28.1003	5.1451
2	46.8338	19.7889	0.7916
3	12.5330	22.4274	8.4433
4	7.3879	21.8997	6.0686
5	6.0686	18.3377	5.8047
6	7.7836	17.5462	7.1240
7	8.1794	18.0739	7.7836
8	5.6728	18.2058	5.5409
9	5.0132	15.9631	5.0132
10	2.6385	14.7757	2.5066
11	1.3193	14.7757	1.1873
12	0.3958	10.1583	0.3958
13	0.1319	8.3113	0.1319
14	0.0000	8.0475	0.0000
15	0.0000	4.3536	0.0000
16	0.0000	0.0000	0.0000

Table 2.7: Results for problem `bandm`

iter	TAPIA	NEW	INTER
1	29.5872	32.3394	6.4220
2	23.8532	20.6422	3.4404
3	20.6422	24.3119	13.3028
4	5.7339	25.2294	5.7339
5	3.2110	22.2477	2.5229
6	8.0275	19.4954	4.5872
7	19.2661	17.2018	8.2569
8	13.0734	15.5963	5.9633
9	9.6330	14.6789	5.2752
10	3.8991	10.7798	1.6055
11	0.9174	5.0459	0.4587
12	0.9174	3.4404	0.4587
13	0.0000	1.8349	0.0000
14	0.2294	1.8349	0.0000
15	0.0000	1.1468	0.0000
16	0.0000	0.4587	0.0000
17	0.0000	0.0000	0.0000

Table 2.8: Results for problem `beaconfd`

iter	TAPIA	NEW	INTER
1	32.9630	55.5556	11.1111
2	17.0370	29.6296	8.1481
3	18.8889	36.2963	14.4444
4	27.0370	34.4444	20.3704
5	23.7037	31.4815	21.8519
6	17.4074	27.4074	17.4074
7	11.8519	25.5556	11.8519
8	7.7778	24.4444	7.7778
9	2.2222	22.2222	2.2222
10	0.0000	22.2222	0.0000
11	0.0000	10.3704	0.0000
12	0.0000	1.1111	0.0000
13	0.0000	0.0000	0.0000

Table 2.9: Results for problem `blend`

iter	Tapia	New	Inter
1	21.9298	30.7018	0.0000
2	23.6842	12.2807	2.6316
3	11.4035	9.6491	0.0000
4	7.0175	17.5439	0.8772
5	21.9298	14.0351	9.6491
6	11.4035	12.2807	5.2632
7	1.7544	9.6491	1.7544
8	0.0000	1.7544	0.0000
9	0.0000	0.0000	0.0000
10	0.0000	0.8772	0.0000
11	0.0000	0.0000	0.0000
12	0.0000	0.0000	0.0000

Table 2.10: Results for problem `bnl2`

iter	Tapia	New	Inter
1	19.4357	28.6456	4.1535
2	18.6907	17.3815	4.2438
3	21.4898	13.0474	3.6117
4	21.4447	12.0993	4.2212
5	22.4379	15.4853	7.9233
6	19.4131	18.7810	9.7743
7	18.3070	23.9052	11.8736
8	16.2528	27.2235	13.0248
9	13.7020	26.7494	11.1738
10	13.3409	27.3589	9.9323
11	13.3409	26.5463	8.5779
12	13.6795	25.1242	8.7585
13	14.9210	22.1670	6.9752
14	26.0722	18.1941	8.1490
15	34.6727	16.1851	6.0497
16	29.5485	13.3634	5.1693
17	23.7923	11.4673	4.1535
18	17.6749	9.7291	2.6411
19	14.0632	8.8713	1.9413
20	11.5576	8.1264	1.6253
21	9.0068	7.5621	1.4447
22	6.4108	6.8849	0.8804
23	3.2957	6.5463	0.5643
24	2.5282	5.6885	0.6546
25	1.3318	4.8758	0.3612
26	1.1061	4.5598	0.3160
27	0.9481	4.3567	0.3612
28	1.0835	3.7472	0.0677
29	0.1354	3.1377	0.0677
30	0.0677	2.5959	0.0000
31	0.0451	0.2483	0.0000
32	0.0000	0.0000	0.0000
33	0.0000	0.0000	0.0000

Table 2.11: Results for problem `boeing1`

iter	Tapia	New	Inter
1	19.0443	13.0886	2.1468
2	17.8670	9.3490	1.1773
3	16.4820	7.6177	0.6233
4	8.1025	8.7950	1.1773
5	6.7175	10.5263	5.0554
6	8.1025	15.6510	6.8560
7	12.4654	16.4127	10.8033
8	12.8116	16.8283	10.9418
9	12.1191	18.0748	10.1801
10	4.9861	18.9751	4.6399
11	3.4626	17.9363	2.0083
12	2.5623	16.3435	1.9391
13	2.2161	15.0277	1.7313
14	2.2853	12.6731	1.8698
15	1.1080	9.8338	0.9695
16	0.7618	4.9169	0.6925
17	0.4155	3.5319	0.1385
18	0.4155	2.4931	0.4155
19	0.1385	1.1773	0.1385
20	0.0000	1.0388	0.0000
21	0.0000	0.2078	0.0000
22	0.0000	0.0000	0.0000

Table 2.12: Results for problem `boeing2`

iter	Tapia	New	Inter
1	22.4014	28.1362	0.0000
2	17.0251	27.7778	2.6882
3	19.1756	23.6559	0.7168
4	11.1111	15.9498	0.7168
5	3.7634	16.4875	0.7168
6	3.0466	15.2330	2.3297
7	3.5842	15.5914	3.2258
8	2.6882	14.1577	2.5090
9	3.9427	15.2330	3.2258
10	12.5448	17.5627	6.6308
11	9.6774	20.0717	6.9892
12	3.2258	17.2043	1.9713
13	1.0753	9.3190	0.7168
14	0.3584	5.7348	0.3584
15	0.0000	2.5090	0.0000
16	0.0000	0.3584	0.0000
17	0.0000	0.1792	0.0000
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000

Table 2.13: Results for problem `bore3d`

iter	TAPIA	NEW	INTER
1	12.5000	13.6667	12.0000
2	18.3333	15.8333	12.5000
3	9.0000	17.0000	9.0000
4	8.6667	15.0000	6.5000
5	10.8333	19.8333	10.5000
6	8.5000	21.0000	8.1667
7	7.0000	18.5000	6.3333
8	2.5000	17.6667	1.6667
9	2.8333	12.6667	1.6667
10	2.1667	11.3333	1.0000
11	1.3333	7.5000	0.5000
12	0.8333	2.6667	0.1667
13	0.0000	1.8333	0.0000
14	0.0000	1.1667	0.0000
15	0.0000	1.3333	0.0000
16	0.0000	1.1667	0.0000
17	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000

Table 2.14: Results for problem `brandy`

iter	TAPIA	NEW	INTER
1	21.6216	21.6216	1.9305
2	13.8996	16.2162	1.5444
3	10.0386	15.0579	1.1583
4	6.5637	15.0579	1.9305
5	7.7220	21.2355	7.3359
6	17.3745	24.3243	14.2857
7	16.2162	24.3243	14.6718
8	6.5637	22.3938	6.1776
9	2.3166	20.4633	1.9305
10	0.0000	17.3745	0.0000
11	0.3861	15.4440	0.3861
12	0.0000	9.6525	0.0000
13	0.3861	8.1081	0.0000
14	0.0000	4.6332	0.0000
15	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000

Table 2.15: Results for problem `capri`

iter	TAPIA	NEW	INTER
1	21.0084	16.8067	0.1050
2	23.1092	15.3361	0.0000
3	24.0546	10.0840	0.3151
4	21.3235	5.8824	0.0000
5	12.2899	4.2017	0.0000
6	3.3613	3.7815	0.6303
7	1.6807	3.9916	1.0504
8	1.5756	3.9916	1.4706
9	1.0504	3.5714	0.9454
10	0.3151	3.1513	0.3151
11	0.9454	1.9958	0.2101
12	0.6303	1.4706	0.1050
13	0.4202	1.4706	0.2101
14	0.0000	0.4202	0.0000
15	0.0000	0.1050	0.0000
16	0.0000	0.1050	0.0000
17	0.0000	0.1050	0.0000
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000

Table 2.16: Results for problem `czprob`

iter	TAPIA	NEW	INTER
1	22.7316	22.9863	22.7316
2	11.8752	22.9545	10.1242
3	7.8001	23.0818	7.5454
4	8.6278	24.5463	8.5642
5	3.5021	24.3871	2.5151
6	4.6164	24.0688	2.2923
7	5.3168	19.8981	1.9739
8	6.6858	19.4842	1.9739
9	8.0548	17.7969	1.7829
10	8.8507	14.6132	1.8465
11	8.7870	12.2572	2.1012
12	9.9650	10.1560	2.2604
13	12.2572	9.6148	1.7510
14	12.9895	8.4050	2.2604
15	12.2891	6.7494	2.1331
16	13.1487	5.6033	2.0057
17	9.4874	4.7437	1.4327
18	6.7813	4.3935	0.8278
19	6.5266	3.2792	0.7959
20	3.4066	2.8335	0.5412
21	2.8335	2.5470	0.3820
22	2.1331	2.0376	0.4139
23	1.1461	0.5731	0.1273
24	0.4457	0.5094	0.0637
25	0.5094	0.3820	0.0318
26	0.8278	0.2865	0.0000
27	0.5731	0.1273	0.0000
28	0.9869	0.2229	0.0000
29	0.5094	0.0637	0.0000
30	0.0000	0.0000	0.0000
31	0.0000	0.0000	0.0000
32	0.0000	0.0000	0.0000

Table 2.17: Results for problem `d6cube`

iter	TAPIA	NEW	INTER
1	2.4903	0.0000	0.0000
2	2.2154	0.0647	0.0647
3	1.2613	1.3260	1.0996
4	1.5524	1.3098	0.5660
5	3.0563	1.3745	0.1940
6	9.4437	1.5362	0.0809
7	94.9709	0.9702	0.1132
8	57.7296	0.8894	0.0970
9	46.0058	0.6792	0.0647
10	34.8642	0.4366	0.0485
11	25.9217	0.2587	0.0323
12	17.5129	0.1617	0.0323
13	9.6539	0.1617	0.0000
14	7.1798	0.0809	0.0000
15	3.8163	0.0485	0.0000
16	3.1210	0.0323	0.0000
17	1.6979	0.0162	0.0000
18	0.2587	0.0000	0.0000
19	0.3396	0.0000	0.0000
20	0.0162	0.0000	0.0000
21	0.0162	0.0000	0.0000
22	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000

Table 2.18: Results for problem `degen2`

iter	TAPIA	NEW	INTER
1	22.9855	29.4584	22.9855
2	31.0436	31.0436	31.0436
3	0.1321	29.9868	0.1321
4	2.1136	28.0053	0.0000
5	14.9273	1.4531	0.0000
6	11.7569	0.0000	0.0000
7	4.0951	0.0000	0.0000
8	2.2457	0.0000	0.0000
9	2.5099	0.0000	0.0000
10	2.2457	0.2642	0.2642
11	0.5284	0.3963	0.0000
12	0.0000	0.7926	0.0000
13	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000

Table 2.19: Results for problem `e226`

iter	Tapia	New	Inter
1	21.7484	22.1748	2.7719
2	20.8955	20.0426	7.6759
3	18.9765	24.9467	15.7783
4	18.3369	27.7186	16.2047
5	8.9552	25.7996	8.1023
6	4.6908	20.4691	2.3454
7	12.5800	13.6461	2.1322
8	20.0426	13.0064	1.7058
9	22.6013	10.0213	2.5586
10	15.7783	8.3156	2.1322
11	17.9104	5.3305	2.5586
12	10.4478	4.0512	1.4925
13	6.8230	3.4115	0.4264
14	4.6908	2.7719	0.4264
15	0.8529	1.0661	0.0000
16	0.4264	0.6397	0.2132
17	0.4264	0.6397	0.2132
18	0.4264	0.6397	0.2132
19	0.6397	0.4264	0.2132
20	0.0000	0.2132	0.0000
21	0.0000	0.2132	0.0000
22	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000

Table 2.20: Results for problem `fit1d`

iter	Tapia	New	Inter
1	12.3928	45.8532	12.3928
2	1.4299	45.9485	1.4299
3	3.9561	46.3775	3.3365
4	4.7664	15.3480	3.7178
5	24.9285	4.9571	3.1935
6	15.1096	8.1506	4.5758
7	8.1983	7.5310	3.2412
8	1.8112	6.3394	1.4776
9	0.7626	4.0991	0.6196
10	1.0010	2.1449	0.1907
11	0.1430	1.3823	0.0953
12	0.1430	0.8580	0.1430
13	0.0000	0.5243	0.0000
14	0.0477	0.2383	0.0477
15	0.0477	0.2383	0.0477
16	0.0000	0.0953	0.0000
17	0.0477	0.0477	0.0000
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000

Table 2.21: Results for problem `forplan`

iter	Tapia	New	Inter
1	6.9114	38.6609	2.9158
2	8.2073	38.2289	0.9719
3	4.2117	6.3715	1.8359
4	3.0238	6.3715	2.9158
5	3.4557	6.4795	3.1317
6	6.5875	6.9114	3.7797
7	2.9158	8.0994	2.6998
8	3.1317	10.6911	3.1317
9	10.6911	11.2311	6.4795
10	8.3153	16.7387	7.9914
11	4.2117	16.5227	4.1037
12	2.9158	13.1749	2.8078
13	1.6199	9.0713	1.6199
14	0.4320	5.6156	0.1080
15	0.2160	3.4557	0.2160
16	0.4320	2.5918	0.2160
17	0.1080	2.0518	0.1080
18	0.1080	1.0799	0.1080
19	0.0000	0.3240	0.0000
20	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000

Table 2.22: Results for problem `ganges`

iter	Tapia	New	Inter
1	37.1578	8.4420	0.0326
2	37.4511	8.4420	0.0000
3	23.6962	8.3442	0.0000
4	9.3220	8.8331	2.4446
5	1.0430	11.3755	1.0430
6	5.0522	8.2464	5.0522
7	3.6506	8.5072	2.9661
8	2.5098	8.3442	2.0860
9	2.7053	7.9205	0.9778
10	3.3572	7.0404	0.0000
11	4.4003	2.0209	0.0000
12	5.4433	0.0000	0.0000
13	5.7040	1.9557	1.9557
14	2.8031	3.2269	1.8253
15	1.3690	2.6728	1.0756
16	0.2282	1.0430	0.0978
17	0.0000	0.0652	0.0000
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000

Table 2.23: Results for problem `gfrd-pnc`

iter	Tapia	New	Inter
1	29.0647	27.1416	20.6294
2	33.3916	27.4913	24.3444
3	35.7955	27.5787	25.7867
4	34.0035	35.9266	34.0035
5	27.2290	35.8392	27.2290
6	21.7220	35.8829	20.6731
7	16.3024	36.1014	13.5052
8	19.4056	36.2762	11.1451
9	7.6486	36.5822	2.2290
10	4.7203	36.6259	0.9178
11	4.4143	35.7517	1.4860
12	5.1573	36.0577	1.1801
13	0.9615	36.0577	0.3497
14	0.2185	35.8829	0.0874
15	0.0000	32.3427	0.0000
16	0.0000	3.9773	0.0000
17	0.1311	0.6993	0.0874
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000

Table 2.24: Results for problem `israel`

iter	Tapia	New	Inter
1	24.6835	18.0380	5.6962
2	25.0000	15.1899	5.6962
3	18.3544	15.8228	6.9620
4	7.2785	15.5063	1.5823
5	11.0759	18.9873	7.2785
6	2.8481	17.0886	2.2152
7	30.0633	25.3165	18.3544
8	24.0506	25.6329	14.2405
9	25.3165	25.9494	9.8101
10	23.7342	28.1646	8.5443
11	21.5190	29.1139	10.1266
12	14.2405	33.2278	9.8101
13	4.1139	32.5949	4.1139
14	1.8987	31.6456	1.8987
15	0.9494	31.0127	0.9494
16	0.0000	30.3797	0.0000
17	0.0000	23.7342	0.0000
18	0.0000	11.3924	0.0000
19	0.3165	1.5823	0.0000
20	0.3165	0.6329	0.0000
21	0.0000	0.3165	0.0000
22	0.0000	0.0000	0.0000

Table 2.25: Results for problem `kb2`

iter	Tapia	New	Inter
1	22.7941	0.0000	0.0000
2	10.2941	0.7353	0.7353
3	2.9412	4.4118	0.0000
4	5.8824	13.9706	5.8824
5	11.7647	9.5588	5.1471
6	9.5588	8.0882	3.6765
7	11.7647	9.5588	7.3529
8	8.8235	13.2353	8.8235
9	2.2059	12.5000	2.2059
10	1.4706	10.2941	1.4706
11	2.2059	7.3529	0.7353
12	0.0000	2.9412	0.0000
13	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000

Table 2.26: Results for problem `modszk1`

iter	Tapia	New	Inter
1	67.8175	40.6289	38.7176
2	36.9914	42.4168	35.1418
3	17.9408	38.7176	17.9408
4	2.8977	38.1628	2.8360
5	1.1097	36.3132	0.8015
6	0.8015	34.5869	0.3699
7	1.1714	31.9975	0.4932
8	1.1714	29.2848	0.2466
9	1.6030	25.2774	0.1850
10	10.7891	22.9963	0.2466
11	4.6856	21.0851	0.4316
12	1.7879	17.6326	0.4316
13	2.0345	8.7546	0.5549
14	1.9112	4.4390	0.6782
15	1.7879	2.2195	0.8015
16	0.4932	1.1714	0.0000
17	0.2466	0.8015	0.0000
18	0.0617	0.4932	0.0000
19	0.0000	0.3699	0.0000
20	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000

Table 2.27: Results for problem `pilot`

iter	TAPIA	NEW	INTER
1	11.3915	4.3483	1.2669
2	10.1245	4.0584	0.9770
3	11.4881	3.4894	0.3328
4	10.7365	3.6289	0.1181
5	5.6045	3.8329	0.8482
6	4.5093	4.5845	1.3850
7	4.7670	6.0769	2.6841
8	6.4527	7.0432	3.9618
9	8.7181	7.7947	4.9925
10	10.7473	8.3745	5.7548
11	11.9712	9.5018	6.6996
12	17.0818	10.3607	8.3208
13	17.2643	10.4359	6.8606
14	14.1185	10.4681	5.4005
15	10.2319	10.3071	3.6289
16	7.7303	9.7058	2.9525
17	5.5508	9.1368	2.3298
18	3.9081	9.0402	1.6212
19	3.1995	8.8684	1.4280
20	3.1780	8.4926	1.3635
21	2.7593	7.3223	1.2991
22	2.0721	5.7011	0.9556
23	1.2562	4.8207	0.6227
24	0.8804	4.5952	0.4617
25	0.6120	3.5538	0.2899
26	0.3436	3.0170	0.1503
27	0.2469	1.8789	0.0966
28	0.1181	1.6856	0.0537
29	0.0644	1.6856	0.0429
30	0.0859	1.3421	0.0644
31	0.0859	1.0737	0.0859
32	0.0752	0.7516	0.0752
33	0.0215	0.4617	0.0000
34	0.0000	0.1933	0.0000
35	0.0000	0.1933	0.0000
36	0.0000	0.1718	0.0000
37	0.0000	0.0752	0.0000
38	0.0000	0.0322	0.0000
39	0.0000	0.0000	0.0000

Table 2.28: Results for problem `pilot4`

iter	TAPIA	NEW	INTER
1	18.2438	28.3035	11.5942
2	15.9420	26.5985	10.5712
3	13.9812	19.8210	8.1841
4	12.5320	18.2864	7.7579
5	17.1782	18.2012	14.2370
6	17.6897	19.3095	16.1125
7	15.4305	20.2899	14.7485
8	12.9582	20.7587	12.8303
9	11.8926	20.6735	11.3384
10	8.5251	20.5030	7.8431
11	7.5448	20.0767	6.7775
12	6.9054	19.3521	6.3512
13	6.5217	18.5422	5.7545
14	6.5217	17.7323	5.4561
15	5.5840	17.5192	4.3478
16	3.8363	16.5388	3.1117
17	2.9838	15.1748	2.5149
18	2.1739	14.1944	1.8755
19	1.1935	13.9386	0.8951
20	0.5968	13.6402	0.3836
21	0.4689	13.5550	0.2984
22	0.3410	13.5550	0.2558
23	0.5541	13.5124	0.3410
24	0.2984	12.8303	0.1705
25	0.2558	6.3086	0.1279
26	0.1279	3.3674	0.1279
27	0.0000	3.1117	0.0000
28	0.0000	1.7903	0.0000
29	0.0000	0.0000	0.0000
30	0.0000	0.0000	0.0000

Table 2.29: Results for problem `pilotnov`

iter	TAPIA	NEW	INTER
1	22.3238	2.8769	0.2230
2	23.5727	2.8100	0.1115
3	26.2935	2.5870	0.0223
4	26.8733	0.8029	0.0223
5	24.7547	0.8921	0.0446
6	20.7404	1.0259	0.4014
7	18.5995	1.1151	0.3122
8	15.0758	1.6726	0.7136
9	12.0651	2.5201	1.7395
10	8.7868	4.6610	3.0107
11	5.8653	7.8278	4.2373
12	3.6798	8.6530	3.1222
13	2.3417	7.4710	2.0294
14	1.7172	6.7128	1.4942
15	1.6057	3.2783	1.5165
16	1.2935	1.9402	1.2935
17	1.1597	1.6949	1.1597
18	0.0000	1.6503	0.0000
19	0.0000	1.3158	0.0000
20	0.0000	0.0000	0.0000

Table 2.30: Results for problem `recipe`

iter	TAPIA	NEW	INTER
1	20.9040	0.0000	0.0000
2	14.1243	0.0000	0.0000
3	1.9774	0.0000	0.0000
4	6.7797	5.6497	5.6497
5	6.7797	5.9322	5.9322
6	0.0000	4.8023	0.0000
7	0.0000	4.8023	0.0000
8	0.0000	0.0000	0.0000
9	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000

Table 2.31: Results for problem `sc105`

iter	TAPIA	NEW	INTER
1	9.2025	41.7178	6.1350
2	3.6810	39.2638	3.6810
3	42.9448	42.9448	42.9448
4	0.0000	42.3313	0.0000
5	0.0000	36.8098	0.0000
6	0.0000	28.8344	0.0000
7	0.0000	3.0675	0.0000
8	0.0000	0.6135	0.0000
9	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000

Table 2.32: Results for problem `sc205`

iter	TAPIA	NEW	INTER
1.0000	26.4984	38.8013	11.3565
2.0000	17.3502	38.1703	17.3502
3.0000	39.1167	39.1167	39.1167
4.0000	11.0410	38.8013	11.0410
5.0000	3.7855	36.2776	3.7855
6.0000	0.0000	34.0694	0.0000
7.0000	0.0000	31.8612	0.0000
8.0000	0.0000	23.6593	0.0000
9.0000	0.0000	17.6656	0.0000
10.0000	0.0000	0.0000	0.0000
11.0000	0.0000	0.0000	0.0000
12.0000	0.0000	0.0000	0.0000
13.0000	0.0000	0.0000	0.0000

Table 2.33: Results for problem `sc50a`

iter	TAPIA	NEW	INTER
1	1.2987	37.6623	0.0000
2	0.0000	40.2597	0.0000
3	41.5584	40.2597	40.2597
4	0.0000	37.6623	0.0000
5	0.0000	35.0649	0.0000
6	0.0000	27.2727	0.0000
7	0.0000	2.5974	0.0000
8	0.0000	1.2987	0.0000
9	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000

Table 2.34: Results for problem `sc50b`

iter	TAPIA	NEW	INTER
1	0.0000	30.2632	0.0000
2	0.0000	35.5263	0.0000
3	17.1053	35.5263	15.7895
4	0.0000	32.8947	0.0000
5	0.0000	28.9474	0.0000
6	0.0000	0.0000	0.0000
7	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000

Table 2.35: Results for problem `scagr25`

iter	TAPIA	NEW	INTER
1	17.2876	7.0045	7.0045
2	12.0715	7.1535	1.7884
3	13.4128	8.0477	5.0671
4	15.2012	9.8361	8.1967
5	12.5186	10.5812	8.1967
6	9.5380	14.3070	7.8987
7	7.6006	13.7109	7.0045
8	8.0477	14.4560	7.4516
9	3.5768	13.8599	3.4277
10	2.2355	13.1148	2.2355
11	0.7452	8.1967	0.1490
12	0.5961	7.0045	0.1490
13	0.2981	4.4709	0.1490
14	0.1490	0.4471	0.1490
15	0.0000	0.1490	0.0000
16	0.0000	0.0000	0.0000

Table 2.36: Results for problem `scagr7`

iter	TAPIA	NEW	INTER
1	7.0270	1.0811	1.0811
2	9.7297	1.0811	0.5405
3	15.6757	14.5946	13.5135
4	8.1081	14.5946	8.1081
5	3.7838	10.2703	3.7838
6	4.8649	9.1892	4.8649
7	0.0000	8.1081	0.0000
8	0.5405	7.0270	0.0000
9	0.5405	6.4865	0.5405
10	0.5405	3.2432	0.5405
11	0.5405	0.5405	0.5405
12	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000

Table 2.37: Results for problem `scfxm1`

iter	TAPIA	NEW	INTER
1	23.3108	48.4797	2.3649
2	19.5946	32.2635	1.5203
3	10.9797	19.5946	1.6892
4	5.9122	18.4122	1.6892
5	4.0541	21.2838	2.7027
6	5.0676	20.6081	4.8986
7	5.7432	20.7770	4.5608
8	5.9122	20.4392	5.5743
9	13.6824	20.4392	9.6284
10	15.8784	20.7770	11.1486
11	9.9662	18.7500	6.2500
12	3.2095	14.3581	1.5203
13	1.0135	7.4324	0.1689
14	0.0000	3.7162	0.0000
15	0.0000	1.8581	0.0000
16	0.0000	1.3514	0.0000
17	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000

Table 2.38: Results for problem `scfxm2`

iter	TAPIA	NEW	INTER
1	22.9730	46.2838	1.9426
2	19.5946	26.5203	1.2669
3	11.4865	16.8919	1.6047
4	7.6014	14.2736	1.4358
5	4.8142	16.8919	3.2095
6	4.0541	21.7061	3.8851
7	10.8953	19.1723	8.4459
8	10.9797	18.5811	7.0946
9	14.5270	18.3277	8.6993
10	13.0068	17.6520	8.0236
11	9.7128	17.5676	4.8142
12	4.8986	13.3446	2.5338
13	2.1959	8.7838	0.8446
14	1.0135	4.3074	0.1689
15	0.3378	2.4493	0.1689
16	0.0845	1.2669	0.0845
17	0.0000	1.0135	0.0000
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000

Table 2.39: Results for problem `scfxm3`

iter	TAPIA	NEW	INTER
1	22.8604	45.4955	1.8018
2	19.5383	20.4955	1.2387
3	12.1622	14.5833	1.5203
4	7.7140	12.1059	1.2387
5	5.0113	15.1464	3.7162
6	3.7725	21.3401	3.6036
7	10.4167	19.2568	8.0518
8	12.7252	17.8491	7.7140
9	11.6554	17.2860	7.2072
10	17.4550	17.1171	9.6847
11	18.3559	17.2297	9.9099
12	15.3716	17.3986	7.6577
13	7.3761	14.7523	3.5473
14	2.1396	8.9527	0.6757
15	1.1261	3.8851	0.2252
16	0.6194	1.9144	0.2252
17	0.1689	1.1824	0.0000
18	0.0000	0.7883	0.0000
19	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000

Table 2.40: Results for problem `scorpion`

iter	TAPIA	NEW	INTER
1	9.4923	35.9823	5.9603
2	14.1280	27.5938	12.1413
3	7.5055	37.0861	7.5055
4	54.5254	55.6291	52.7594
5	22.2958	53.2009	20.3091
6	10.5960	45.0331	9.9338
7	5.0773	41.2804	4.8565
8	2.8698	30.6843	2.8698
9	1.9868	16.1148	1.9868
10	0.6623	8.8300	0.6623
11	0.0000	7.9470	0.0000
12	0.0000	5.7395	0.0000
13	0.0000	1.1038	0.0000
14	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000

Table 2.41: Results for problem `scrs8`

iter	TAPIA	NEW	INTER
1	21.7323	5.0394	4.9606
2	10.3937	9.8425	6.4567
3	9.5276	7.7165	6.2992
4	13.3858	11.1024	9.3701
5	7.6378	13.4646	5.7480
6	5.6693	15.7480	4.4094
7	4.0157	16.3780	1.9685
8	44.5669	16.2992	1.1811
9	58.8189	15.8268	1.3386
10	59.9213	14.4882	2.2047
11	55.2756	11.1811	0.5512
12	50.3150	8.5827	0.0787
13	42.7559	6.2205	0.1575
14	35.1969	4.8031	0.0787
15	26.6142	2.3622	0.0787
16	18.5039	0.5512	0.0000
17	7.7165	0.8661	0.6299
18	0.9449	0.9449	0.7087
19	0.6299	0.3937	0.3937
20	0.0000	0.3150	0.0000
21	0.0000	0.4724	0.0000
22	0.0000	0.3937	0.0000
23	0.0000	0.0787	0.0000
24	0.0000	0.0000	0.0000
25	0.0000	0.0000	0.0000

Table 2.42: Results for problem `scsd1`

iter	TAPIA	NEW	INTER
1	80.7895	95.9211	80.7895
2	4.0789	2.2368	2.2368
3	0.7895	1.8421	0.2632
4	0.5263	1.3158	0.0000
5	2.5000	0.7895	0.3947
6	0.0000	0.1316	0.0000
7	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000
9	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000
11	0.0000	0.0000	0.0000

Table 2.43: Results for problem `scsd8`

iter	Tapia	New	Inter
1	79.9636	79.9636	79.9636
2	20.0364	0.0000	0.0000
3	12.2182	0.0000	0.0000
4	6.2545	0.0000	0.0000
5	3.2000	0.0000	0.0000
6	0.0364	0.2182	0.0000
7	0.0000	0.0000	0.0000
8	0.0000	0.0000	0.0000
9	0.0000	0.0000	0.0000
10	0.0000	0.0000	0.0000
11	0.0000	0.0000	0.0000
12	0.0000	0.0000	0.0000

Table 2.44: Results for problem `sctap1`

iter	Tapia	New	Inter
1	47.7273	45.3030	42.7273
2	37.1212	55.3030	36.6667
3	30.4545	59.3939	30.4545
4	15.6061	59.6970	15.6061
5	22.8788	56.0606	0.0000
6	12.1212	49.3939	0.4545
7	6.2121	36.9697	0.0000
8	3.0303	17.5758	0.1515
9	0.6061	9.6970	0.0000
10	0.9091	4.3939	0.4545
11	0.3030	1.6667	0.1515
12	0.6061	0.4545	0.4545
13	0.0000	0.3030	0.0000
14	0.0000	0.0000	0.0000
15	0.0000	0.1515	0.0000
16	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000

Table 2.45: Results for problem `sctap2`

iter	Tapia	New	Inter
1	50.9600	31.6000	27.8000
2	42.6000	47.5200	39.5600
3	34.9600	57.2000	34.9600
4	19.6000	61.6400	19.6000
5	25.8000	61.5600	0.0000
6	23.4400	53.7200	0.0000
7	10.2800	41.6000	0.1200
8	5.6000	15.8800	0.0000
9	2.9200	7.6400	0.0000
10	0.3600	6.6800	0.0400
11	0.2400	4.8400	0.0800
12	0.1200	4.3200	0.0800
13	0.3200	3.2400	0.1200
14	0.2000	2.4400	0.0000
15	0.0800	1.0800	0.0000
16	0.0800	0.2400	0.0000
17	0.0000	0.0400	0.0000
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000

Table 2.46: Results for problem `sctap3`

iter	Tapia	New	Inter
1	48.7126	30.0599	25.7784
2	40.9281	40.2695	35.2695
3	37.0359	49.5509	36.7365
4	23.0539	62.5150	23.0539
5	27.0659	61.4671	0.0000
6	21.0180	59.3713	0.0000
7	11.3174	47.7246	0.0000
8	5.4491	12.2156	0.0000
9	2.7844	7.2754	0.0000
10	1.6168	5.2695	0.0000
11	0.5689	3.9820	0.0599
12	0.0599	3.6527	0.0299
13	0.1497	2.9042	0.0299
14	0.3593	1.6467	0.1198
15	0.0000	0.8084	0.0000
16	0.0000	0.0299	0.0000
17	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000

Table 2.47: Results for problem `seba`

iter	Tapia	New	Inter
1	6.4672	34.5077	4.4402
2	5.3089	35.1351	2.7027
3	10.5212	33.8803	5.2124
4	8.5907	25.1931	3.9093
5	9.7008	25.1448	4.7297
6	9.3147	27.6544	5.4537
7	9.3629	29.8263	5.5019
8	10.5695	30.2124	5.8880
9	17.9054	22.5386	7.3359
10	20.5598	18.6776	12.1622
11	16.9884	17.9537	11.1969
12	12.5483	16.8919	8.3494
13	6.2259	16.4093	3.3784
14	4.7297	15.5405	2.7510
15	0.7239	12.3552	0.2413
16	0.1931	3.2819	0.0965
17	0.0483	0.7239	0.0483
18	0.0000	0.1448	0.0000
19	0.0000	0.0965	0.0000
20	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000

Table 2.48: Results for problem `share1b`

iter	Tapia	New	Inter
1	15.3226	54.8387	0.8065
2	12.5000	54.4355	0.8065
3	4.8387	53.6290	1.6129
4	9.2742	50.0000	7.2581
5	9.2742	44.7581	8.8710
6	41.5323	45.9677	36.2903
7	33.0645	47.9839	29.0323
8	35.8871	49.1935	35.0806
9	15.3226	50.0000	14.9194
10	13.7097	50.0000	13.3065
11	18.9516	50.0000	18.5484
12	21.3710	49.5968	21.3710
13	17.3387	47.9839	16.9355
14	10.0806	46.7742	10.0806
15	5.2419	43.1452	5.2419
16	2.4194	36.2903	2.4194
17	0.0000	30.6452	0.0000
18	0.8065	23.3871	0.8065
19	0.0000	19.3548	0.0000
20	0.0000	0.4032	0.0000
21	0.0000	0.0000	0.0000

Table 2.49: Results for problem `share2b`

iter	Tapia	New	Inter
1	25.9259	20.9877	4.3210
2	12.9630	19.7531	2.4691
3	7.4074	19.1358	1.2346
4	3.7037	18.5185	1.8519
5	3.0864	16.6667	3.0864
6	6.7901	16.6667	6.1728
7	4.9383	14.1975	4.3210
8	5.5556	14.1975	4.9383
9	3.0864	10.4938	3.0864
10	0.6173	9.8765	0.6173
11	0.0000	1.2346	0.0000
12	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000

Table 2.50: Results for problem `shell`

iter	Tapia	New	Inter
1	6.0188	38.0296	2.3201
2	6.1197	11.1970	2.5219
3	4.8420	6.2542	1.2441
4	3.0599	6.0525	0.7397
5	1.4459	7.7001	0.8070
6	3.5978	7.4311	1.0760
7	7.9354	8.1708	2.4546
8	7.1284	7.7001	1.5131
9	5.7498	7.4983	0.7397
10	4.9765	6.8931	0.6725
11	6.5232	2.6564	0.3699
12	4.3712	0.9415	0.1345
13	2.9590	0.4707	0.1345
14	0.7734	0.2017	0.0672
15	0.1345	0.1009	0.0000
16	0.3362	0.1681	0.0000
17	0.0000	0.0000	0.0000
18	0.0000	0.0000	0.0000
19	0.0000	0.0000	0.0000

Table 2.51: Results for problem `ship04l`

iter	Tapia	New	Inter
1	13.2285	13.9685	13.0897
2	11.5171	13.5985	11.0083
3	3.2377	12.6272	2.9602
4	4.0241	12.4884	0.1388
5	5.8742	12.3959	0.2313
6	4.8104	11.4709	0.1850
7	3.4690	10.0833	0.1850
8	2.3589	6.1055	0.1388
9	0.5550	2.6364	0.0000
10	0.0000	1.1101	0.0000
11	0.0000	0.0463	0.0000
12	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000

Table 2.52: Results for problem `ship04s`

iter	Tapia	New	Inter
1	14.0736	15.5587	13.6492
2	11.8812	14.6393	11.0325
3	3.8897	13.9321	3.7482
4	5.0919	13.5785	0.0707
5	5.9406	13.7199	0.2829
6	6.0113	13.3663	0.2829
7	5.0212	12.3055	0.2122
8	3.6775	6.5771	0.0707
9	0.2122	2.9703	0.0000
10	0.1414	0.6365	0.0000
11	0.1414	0.1414	0.1414
12	0.0000	0.1414	0.0000
13	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000

Table 2.53: Results for problem `ship08l`

iter	Tapia	New	Inter
1	10.3711	11.0625	10.3480
2	8.8961	10.8550	8.5734
3	1.8437	10.6015	1.7976
4	1.1523	10.1406	0.4148
5	2.6965	9.9562	0.2305
6	3.0191	9.7718	0.2074
7	2.6965	9.2418	0.2074
8	3.5031	8.9882	0.1844
9	3.3187	8.8269	0.0691
10	1.8207	7.9972	0.0230
11	0.8066	2.4199	0.0000
12	0.1152	0.6684	0.0000
13	0.0000	0.0691	0.0000
14	0.0230	0.0000	0.0000
15	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000

Table 2.54: Results for problem `ship08s`

iter	Tapia	New	Inter
1	11.1930	12.8052	10.8245
2	8.7057	12.2985	8.0147
3	1.7043	11.7918	1.6582
4	1.1515	11.5154	0.4606
5	2.4413	10.4560	0.4146
6	5.3432	10.4560	0.4146
7	5.2971	10.2718	0.4146
8	3.6849	9.4427	0.3224
9	1.7964	5.3892	0.1382
10	0.3224	1.7503	0.0000
11	0.0921	0.5527	0.0000
12	0.0000	0.0000	0.0000
13	0.0000	0.0000	0.0000
14	0.0000	0.0000	0.0000

Table 2.55: Results for problem `ship121`

iter	Tapia	New	Inter
1	10.6774	11.7846	10.6774
2	12.6102	11.7470	9.9831
3	3.4528	11.2404	3.3965
4	8.3505	11.6345	0.1314
5	11.6720	11.5219	0.1126
6	13.0606	11.2216	0.0188
7	12.4789	10.2834	0.1877
8	12.7979	9.7392	0.2252
9	9.1950	7.1308	0.2064
10	4.3535	4.4474	0.0751
11	1.0509	2.0642	0.0188
12	0.2627	0.9570	0.0188
13	0.0000	0.3941	0.0000
14	0.0000	0.0188	0.0000
15	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000

Table 2.56: Results for problem `ship12s`

iter	Tapia	New	Inter
1	12.4727	15.3511	12.3419
2	16.6594	15.7436	10.6411
3	2.8347	15.4383	2.8347
4	2.0061	14.6097	0.6542
5	5.1461	14.7405	0.3489
6	9.7253	14.1300	0.2617
7	11.2952	13.2141	0.6542
8	11.4697	11.9930	0.5669
9	12.2111	11.0772	0.5669
10	6.7161	5.5386	0.1744
11	2.0933	2.8347	0.0436
12	0.7850	1.3519	0.0436
13	0.2617	0.6106	0.0000
14	0.0436	0.3053	0.0000
15	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000

Table 2.57: Results for problem `stair`

iter	Tapia	New	Inter
1	14.3123	16.1710	1.1152
2	7.3420	13.3829	0.0929
3	6.8773	9.9442	0.0929
4	8.0855	3.7175	0.4647
5	1.6729	5.5762	0.2788
6	8.1784	7.4349	5.9480
7	5.0186	7.4349	2.8810
8	2.5093	6.7844	1.7658
9	1.9517	5.2974	1.5799
10	0.3717	0.9294	0.3717
11	0.1859	0.5576	0.0929
12	0.0000	0.3717	0.0000
13	0.0000	0.1859	0.0000
14	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000

Table 2.58: Results for problem `standata`

iter	Tapia	New	Inter
1	4.7695	0.0000	0.0000
2	4.4118	0.0397	0.0397
3	3.3386	0.1987	0.1192
4	2.8617	0.2782	0.1192
5	2.4245	0.3975	0.1590
6	2.8617	0.5167	0.1590
7	2.9014	0.5564	0.0397
8	2.6630	0.1590	0.0000
9	5.0477	0.1192	0.0000
10	3.6169	0.1192	0.0000
11	2.3052	0.2782	0.0795
12	1.3514	0.2782	0.0795
13	0.0000	0.1590	0.0000
14	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000

Table 2.59: Results for problem `standgub`

iter	Tapia	New	Inter
1	4.3924	0.0000	0.0000
2	4.0630	0.0366	0.0366
3	3.0015	0.1830	0.1098
4	2.5988	0.2562	0.1098
5	2.2328	0.3660	0.1464
6	2.5988	0.4392	0.1464
7	2.7086	1.1713	0.0366
8	3.0015	0.2928	0.0000
9	4.8316	0.2562	0.0732
10	3.2211	0.2562	0.0000
11	2.5256	0.5490	0.1830
12	1.6105	0.2562	0.1098
13	0.7321	0.1464	0.0000
14	0.0000	0.0000	0.0000
15	0.0000	0.0000	0.0000
16	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000

Table 2.60: Results for problem `standmps`

iter	Tapia	New	Inter
1	9.6184	0.0000	0.0000
2	9.4595	0.0000	0.0000
3	4.8092	0.1192	0.0000
4	3.1002	0.7552	0.1987
5	1.9475	3.5374	0.1987
6	2.5437	4.7695	0.1987
7	4.2130	4.6900	0.2385
8	4.2925	7.6709	0.5564
9	8.1081	4.3323	0.4769
10	8.0286	4.4118	0.4769
11	13.3148	2.6232	0.0397
12	9.0620	1.3116	0.0397
13	0.1192	0.2782	0.0000
14	0.0795	0.1987	0.0000
15	1.5103	0.1987	0.0397
16	0.1192	0.1987	0.0000
17	0.0397	0.1590	0.0000
18	0.4372	0.3180	0.3180
19	1.8283	0.1590	0.0000
20	0.7552	0.0000	0.0000
21	0.0397	0.1192	0.0000
22	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000

Table 2.61: Results for problem `stockfor1`

iter	Tapia	New	Inter
1	26.7516	51.5924	20.3822
2	11.4650	49.6815	8.2803
3	11.4650	52.8662	11.4650
4	7.0064	56.6879	7.0064
5	10.8280	44.5860	3.8217
6	22.9299	29.9363	3.1847
7	15.9236	25.4777	0.0000
8	14.0127	25.4777	0.6369
9	14.6497	24.2038	0.0000
10	13.3758	23.5669	0.6369
11	12.7389	24.2038	0.6369
12	8.2803	22.9299	0.0000
13	7.0064	12.7389	0.0000
14	0.6369	8.9172	0.0000
15	0.0000	0.6369	0.0000
16	0.0000	0.0000	0.0000
17	0.0000	0.0000	0.0000

Table 2.62: Results for problem `stocfor2`

iter	Tapia	New	Inter
1	27.6519	0.0000	0.0000
2	20.3941	0.0657	0.0657
3	27.5862	0.2299	0.2299
4	14.5484	1.1823	1.0837
5	9.6552	2.9885	2.3645
6	5.6486	4.9918	3.1856
7	12.2167	6.5681	3.5468
8	12.3810	6.6010	2.1018
9	7.8489	7.5534	0.9195
10	3.3169	10.2791	0.0000
11	1.7077	10.3448	0.0000
12	1.1494	7.9803	0.0000
13	0.6897	5.7143	0.0328
14	4.4007	5.5829	0.0328
15	7.9475	4.7947	0.0328
16	6.6667	3.8424	0.0328
17	5.2874	0.3284	0.0000
18	2.0361	0.2299	0.0000
19	0.3284	0.0657	0.0000
20	0.0000	0.0328	0.0000
21	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000
24	0.0000	0.0000	0.0000

Table 2.63: Results for problem `tuff`

iter	Tapia	New	Inter
1	8.8331	0.1621	0.0000
2	5.5916	0.1621	0.1621
3	2.5122	0.2431	0.2431
4	2.1070	0.0000	0.0000
5	2.4311	0.0000	0.0000
6	3.2415	0.4052	0.4052
7	5.1864	0.5673	0.5673
8	7.4554	3.6467	3.2415
9	20.5835	9.5624	9.4003
10	31.4425	22.9335	22.9335
11	21.0697	24.7164	16.6937
12	17.0989	26.1750	13.9384
13	4.2139	26.3371	3.4846
14	5.0243	26.6613	4.2950
15	6.5640	24.1491	6.2399
16	4.0519	17.6661	4.0519
17	1.5397	13.9384	1.5397
18	0.2431	6.8071	0.2431
19	0.1621	9.4814	0.0000
20	0.2431	7.3744	0.0000
21	0.2431	0.5673	0.0000
22	0.0000	0.0000	0.0000
23	0.0000	0.0000	0.0000

Table 2.64: Results for problem `wood1p`

iter	Tapia	New	Inter
1	1.3102	0.0771	0.0000
2	1.5029	0.0000	0.0000
3	1.1946	0.0000	0.0000
4	1.3873	1.2717	1.1946
5	4.5472	1.3102	0.7707
6	11.2909	1.0790	0.4239
7	23.2370	1.0405	0.1156
8	13.7958	0.7707	0.0385
9	11.5992	0.6551	0.0385
10	21.1946	0.5395	0.0000
11	12.3699	0.3854	0.0000
12	9.6724	0.3468	0.0000
13	4.3545	0.2697	0.0000
14	3.6994	0.2697	0.0000
15	1.9653	0.2312	0.0000
16	1.5414	0.0385	0.0000
17	0.3468	0.0000	0.0000
18	0.0000	0.1156	0.0000
19	0.0000	0.0000	0.0000
20	0.0000	0.0000	0.0000
21	0.0000	0.0000	0.0000
22	0.0000	0.0000	0.0000

3. Correctly Identified Indices

Table 3.1: Results for problem `25fv47`

iter	TAPIA	NEW	INTER
1	32.2546	12.9989	6.8501
2	24.8112	17.5836	9.2233
3	22.3301	24.1640	14.0237
4	18.8242	34.0885	17.9072
5	14.5092	50.8630	14.4013
6	19.2017	44.7141	18.8781
7	35.5448	38.4035	27.9935
8	36.7314	36.9471	30.4207
9	35.5987	36.7853	29.3959
10	36.1920	37.9180	29.9892
11	36.0302	39.0507	29.8813
12	37.5405	39.6440	30.3128
13	37.9180	39.6980	29.0183
14	45.7389	40.8846	32.7940
15	53.3981	40.8306	34.0885
16	59.4930	41.1003	35.1672
17	65.3722	42.2330	36.1920
18	76.3754	43.4196	39.6440
19	79.7195	43.9590	40.9924
20	88.2956	46.6559	44.3366
21	93.5814	55.5016	53.8835
22	98.3819	65.9655	65.6419
23	99.2988	80.5286	80.3128
24	100.0000	98.7055	98.7055
25	100.0000	100.0000	100.0000

Table 3.2: Results for problem `adlittle`

iter	TAPIA	NEW	INTER
1	26.2774	31.3869	18.9781
2	21.8978	40.1460	16.0584
3	31.3869	43.7956	9.4891
4	43.0657	50.3650	17.5182
5	52.5547	59.1241	34.3066
6	50.3650	67.1533	38.6861
7	64.9635	78.1022	58.3942
8	77.3723	81.0219	71.5328
9	84.6715	87.5912	81.0219
10	92.7007	97.0803	91.9708
11	100.0000	100.0000	100.0000
12	100.0000	100.0000	100.0000

Table 3.3: Results for problem `afiro`

iter	TAPIA	NEW	INTER
1	39.2157	41.1765	13.7255
2	21.5686	45.0980	13.7255
3	37.2549	45.0980	37.2549
4	78.4314	49.0196	33.3333
5	92.1569	68.6275	60.7843
6	100.0000	100.0000	100.0000
7	100.0000	100.0000	100.0000
8	100.0000	100.0000	100.0000

Table 3.4: Results for problem `agg`

iter	TAPIA	NEW	INTER
1	12.6829	74.6341	1.9512
2	15.6098	30.4065	4.0650
3	20.8130	20.9756	5.5285
4	25.2033	21.3008	8.9431
5	33.3333	23.5772	16.0976
6	36.4228	29.7561	20.3252
7	45.8537	43.0894	32.6829
8	65.6911	46.5041	41.6260
9	77.8862	59.0244	55.1220
10	89.4309	76.9106	74.7967
11	92.8455	84.0650	81.9512
12	92.1951	86.5041	83.2520
13	92.3577	93.6585	90.2439
14	94.1463	93.9837	89.7561
15	95.9350	95.9350	92.8455
16	98.0488	96.0976	94.6341
17	99.3496	98.2114	97.7236
18	100.0000	99.1870	99.1870
19	100.0000	100.0000	100.0000

Table 3.5: Results for problem `agg2`

iter	TAPIA	NEW	INTER
1	6.7282	70.9763	1.4512
2	6.3325	16.3588	1.5831
3	14.2480	22.8232	6.7282
4	21.2401	27.5726	13.8522
5	25.8575	33.7731	18.2058
6	39.7098	42.8760	32.7177
7	74.5383	52.7704	50.0000
8	78.4960	70.0528	67.6781
9	79.5515	71.8997	66.8865
10	83.5092	81.0026	77.1768
11	87.7309	82.0580	80.2111
12	92.4802	83.7731	82.3219
13	96.4380	84.1689	83.5092
14	99.2084	84.6966	84.6966
15	99.7361	88.7863	88.7863
16	100.0000	99.7361	99.7361
17	100.0000	100.0000	100.0000

Table 3.6: Results for problem `agg3`

iter	TAPIA	NEW	INTER
1	8.0475	71.2401	2.6385
2	5.6728	13.3245	1.7150
3	18.2058	24.0106	11.7414
4	23.0871	27.1768	15.4354
5	34.4327	44.0633	27.5726
6	58.0475	54.3536	46.4380
7	77.5726	68.9974	65.6992
8	79.8153	73.0871	67.1504
9	82.5858	74.4063	70.0528
10	87.9947	81.0026	79.0237
11	91.6887	84.9604	83.5092
12	95.7784	84.4327	83.5092
13	98.5488	85.2243	85.2243
14	99.2084	85.2243	85.2243
15	99.8681	91.6887	91.6887
16	100.0000	100.0000	100.0000

Table 3.7: Results for problem `bandm`

iter	TAPIA	NEW	INTER
1	22.7064	49.0826	7.5688
2	22.7064	35.7798	8.2569
3	17.6606	36.4679	12.3853
4	12.8440	42.6606	11.4679
5	22.4771	46.5596	20.4128
6	41.9725	49.7706	31.8807
7	60.0917	50.0000	40.8257
8	61.9266	54.1284	46.1009
9	61.6972	58.2569	48.3945
10	65.5963	61.0092	51.6055
11	77.9817	63.9908	56.8807
12	82.7982	66.7431	60.7798
13	88.0734	73.6239	68.3486
14	91.9725	78.2110	73.6239
15	97.2477	92.6606	90.3670
16	99.7706	99.0826	98.8532
17	100.0000	100.0000	100.0000

Table 3.8: Results for problem `beaconfd`

iter	TAPIA	NEW	INTER
1	37.0370	44.0741	2.9630
2	32.5926	50.7407	24.8148
3	47.0370	60.7407	38.5185
4	59.6296	56.2963	48.5185
5	67.4074	62.9630	56.2963
6	71.8519	69.2593	65.9259
7	76.2963	72.2222	70.7407
8	78.8889	72.5926	71.1111
9	87.4074	72.2222	71.1111
10	92.2222	76.6667	75.5556
11	97.7778	77.4074	76.6667
12	100.0000	84.4444	84.4444
13	100.0000	100.0000	100.0000

Table 3.9: Results for problem `blend`

iter	Tapia	New	Inter
1	28.9474	54.3860	8.7719
2	22.8070	30.7018	4.3860
3	15.7895	35.0877	5.2632
4	15.7895	41.2281	8.7719
5	57.8947	48.2456	40.3509
6	53.5088	56.1404	40.3509
7	64.0351	60.5263	50.0000
8	77.1930	66.6667	60.5263
9	88.5965	72.8070	69.2982
10	98.2456	97.3684	96.4912
11	100.0000	100.0000	100.0000
12	100.0000	100.0000	100.0000

Table 3.10: Results for problem `bnl2`

iter	Tapia	New	Inter
1	34.7630	42.8442	12.7991
2	36.8849	33.9278	13.7020
3	43.5214	28.7810	15.1919
4	43.1828	29.0971	17.9233
5	40.9481	36.7043	26.3657
6	36.3883	43.4537	28.8036
7	34.5598	48.9842	30.1806
8	32.8894	51.4221	29.2777
9	32.0542	51.0158	27.8104
10	33.1828	52.0993	28.0587
11	34.4018	52.6862	29.1422
12	34.6050	51.0835	29.0068
13	34.6953	49.0068	27.1332
14	44.8081	43.4312	28.7133
15	51.8962	39.7517	27.7427
16	50.0677	37.4718	26.9977
17	50.8804	36.6591	27.1783
18	51.3770	36.5011	27.9458
19	51.1287	36.1625	27.5169
20	53.2957	36.7946	29.4582
21	55.9142	37.2912	30.7449
22	58.9842	38.4199	32.3251
23	69.8420	39.5711	35.3499
24	74.6050	41.8284	37.8781
25	85.9142	43.9729	41.5350
26	88.1264	47.5169	45.9142
27	94.5372	57.3589	56.2528
28	96.0045	64.3792	62.6185
29	97.5847	75.1242	73.6117
30	98.9391	82.9345	82.4605
31	99.5260	93.7698	93.4312
32	99.9323	98.1490	98.1038
33	100.0000	100.0000	100.0000

Table 3.11: Results for problem `boeing1`

iter	Tapia	New	Inter
1	49.6537	52.7008	36.3573
2	50.9003	48.6842	37.1884
3	50.2770	49.3767	37.4654
4	48.2687	51.4543	38.5734
5	49.5845	54.9169	42.1053
6	51.9391	61.5651	48.6150
7	63.7119	62.3961	61.2188
8	64.3352	63.0886	61.6343
9	65.4432	64.4737	62.8116
10	61.2881	67.1745	58.8643
11	68.4211	67.5900	57.2022
12	70.3601	68.8366	60.9418
13	73.1302	71.0526	63.0886
14	78.8781	71.1911	65.2355
15	82.6870	72.5762	67.2438
16	87.6731	72.7147	68.6288
17	92.3130	73.8920	71.3989
18	95.4294	79.7784	78.1163
19	98.6150	90.0277	89.8199
20	99.7922	96.0526	95.9834
21	100.0000	99.4460	99.4460
22	100.0000	100.0000	100.0000

Table 3.12: Results for problem `boeing2`

iter	Tapia	New	Inter
1	56.0932	70.7885	38.1720
2	52.1505	68.6380	40.1434
3	56.2724	63.2616	37.6344
4	51.7921	56.6308	37.4552
5	48.3871	59.4982	42.1147
6	52.5090	62.0072	49.4624
7	54.1219	65.7706	52.8674
8	56.4516	67.2043	53.4050
9	58.6022	69.7133	56.4516
10	67.7419	72.2222	65.5914
11	66.3082	73.1183	64.8746
12	67.9211	73.4767	62.0072
13	72.2222	73.6559	64.8746
14	82.2581	73.8351	69.1756
15	94.8029	75.0896	72.4014
16	98.3871	82.6165	81.5412
17	99.6416	98.5663	98.2079
18	100.0000	100.0000	100.0000
19	100.0000	100.0000	100.0000

Table 3.13: Results for problem `bore3d`

iter	TAPIA	NEW	INTER
1	69.1667	70.5000	66.6667
2	68.3333	71.6667	66.5000
3	69.1667	74.0000	68.5000
4	67.0000	73.6667	66.0000
5	68.1667	76.3333	67.8333
6	67.5000	78.0000	65.5000
7	71.3333	78.8333	67.5000
8	79.8333	80.5000	72.1667
9	85.6667	81.3333	76.0000
10	87.1667	84.5000	81.6667
11	91.8333	84.8333	81.0000
12	92.8333	86.0000	82.5000
13	94.6667	87.5000	84.5000
14	98.5000	95.5000	94.6667
15	99.0000	98.3333	97.8333
16	100.0000	98.6667	98.6667
17	100.0000	100.0000	100.0000
18	100.0000	100.0000	100.0000

Table 3.14: Results for problem `brandy`

iter	TAPIA	NEW	INTER
1	33.5907	35.9073	7.3359
2	31.2741	29.7297	9.6525
3	27.7992	29.3436	10.0386
4	25.0965	33.2046	12.7413
5	31.2741	50.9653	29.3436
6	53.2819	55.2124	48.6486
7	57.9151	58.6873	51.3514
8	61.0039	61.0039	54.4402
9	63.7066	61.7761	56.7568
10	65.6371	64.0927	56.3707
11	79.1506	66.0232	60.2317
12	88.0309	72.2008	67.9537
13	93.0502	74.1313	71.4286
14	92.2780	77.6062	76.0618
15	99.6139	91.5058	91.1197
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 3.15: Results for problem `capri`

iter	TAPIA	NEW	INTER
1	51.7857	81.3025	40.0210
2	53.3613	79.0966	42.3319
3	53.3613	67.8571	43.4874
4	52.3109	55.7773	43.2773
5	53.3613	53.5714	45.5882
6	55.5672	55.2521	50.0000
7	52.9412	58.7185	50.3151
8	59.0336	59.6639	54.9370
9	61.0294	62.3950	56.6176
10	69.8529	66.3866	60.5042
11	78.1513	73.0042	68.2773
12	84.8739	76.8908	73.6345
13	88.9706	81.6176	79.2017
14	91.2815	84.9790	82.6681
15	94.4328	91.4916	88.9706
16	98.0042	97.4790	95.6933
17	99.7899	99.7899	99.6849
18	100.0000	100.0000	100.0000
19	100.0000	100.0000	100.0000
20	100.0000	100.0000	100.0000

Table 3.16: Results for problem `czprob`

iter	Tapia	New	Inter
1	76.1859	76.3451	76.1859
2	47.1188	71.9834	47.0869
3	42.0885	74.5941	42.0248
4	42.1840	74.4667	42.1840
5	27.0933	74.7851	26.3292
6	26.0745	75.0080	23.1773
7	26.0427	71.5377	19.5479
8	26.9978	73.4798	18.5928
9	28.9398	74.8488	18.9430
10	31.1047	76.0586	21.2989
11	33.8427	75.8357	24.8329
12	37.0264	75.8357	28.4941
13	41.8656	75.0716	31.9007
14	43.4257	76.0267	34.5431
15	47.0232	75.1035	38.2999
16	51.2576	75.2627	42.2795
17	53.2951	74.3075	44.8265
18	55.5556	74.6896	46.6730
19	55.7784	74.0847	47.9465
20	58.2299	74.1165	49.7294
21	59.5670	74.3712	50.8755
22	67.2397	76.8545	55.8103
23	68.7997	65.2977	51.8625
24	79.9427	63.7377	56.4152
25	83.2219	65.6797	59.6307
26	90.7036	68.1630	63.9924
27	95.0971	80.2611	76.9182
28	96.5298	95.1289	92.2954
29	97.5167	97.0710	94.9379
30	99.7135	99.4269	99.2677
31	100.0000	100.0000	100.0000
32	100.0000	100.0000	100.0000

Table 3.17: Results for problem `d6cube`

iter	Tapia	New	Inter
1	38.0660	0.0000	0.0000
2	97.7846	0.0000	0.0000
3	71.0058	12.7911	11.8208
4	34.4922	44.2594	24.2723
5	16.7206	76.4069	15.9282
6	3.1048	86.4651	2.0537
7	2.0860	61.9664	0.1455
8	2.3933	55.2393	0.2102
9	3.4282	44.5505	0.2911
10	4.9159	33.3279	0.3881
11	6.5330	24.1106	0.3396
12	8.8939	22.4935	0.3881
13	11.9340	23.0433	0.5013
14	14.8609	19.7283	1.0511
15	24.1106	22.2833	1.7303
16	28.3150	27.9269	3.1695
17	45.3105	34.6054	11.1578
18	68.2891	56.4683	40.5239
19	81.1934	70.4237	60.7536
20	94.3564	84.1041	82.6488
21	98.4314	97.3965	96.5395
22	99.4664	99.8545	99.3532
23	99.9838	100.0000	99.9838
24	100.0000	100.0000	100.0000
25	100.0000	100.0000	100.0000

Table 3.18: Results for problem `degen2`

iter	Tapia	New	Inter
1	43.3289	59.5773	42.9326
2	68.9564	68.9564	68.9564
3	26.0238	68.9564	25.4954
4	32.7609	69.4848	26.5522
5	56.6711	49.0092	30.2510
6	60.8983	42.0079	33.4214
7	64.0687	43.7252	35.9313
8	69.8811	47.0277	40.2906
9	75.4293	49.5376	44.5178
10	79.1281	76.8824	73.1836
11	88.7715	85.9974	85.4690
12	93.3950	94.7160	91.1493
13	99.3395	99.2074	98.5469
14	100.0000	100.0000	100.0000
15	100.0000	100.0000	100.0000

Table 3.19: Results for problem `e226`

iter	Tapia	New	Inter
1	29.2111	19.1898	4.4776
2	39.6588	22.8145	13.2196
3	44.5629	45.4158	33.4755
4	42.4307	59.2751	38.5928
5	29.8507	58.8486	26.8657
6	18.9765	54.1578	14.7122
7	28.1450	43.0704	15.1386
8	38.3795	41.7910	16.2047
9	42.6439	40.0853	21.3220
10	46.9083	41.3646	26.2260
11	50.9595	42.8571	30.0640
12	55.8635	45.8422	37.1002
13	58.6354	46.6951	39.6588
14	62.6866	49.6802	43.9232
15	70.3625	55.2239	51.1727
16	79.5309	56.9296	54.7974
17	87.4200	64.1791	61.4072
18	92.9638	75.9062	73.9872
19	92.5373	89.9787	85.7143
20	99.3603	93.3902	93.1770
21	99.7868	99.3603	99.1471
22	99.5736	100.0000	99.5736
23	100.0000	100.0000	100.0000

Table 3.20: Results for problem `fit1d`

iter	Tapia	New	Inter
1	35.0334	49.5234	35.0334
2	8.0076	53.9561	8.0076
3	9.6759	53.4318	9.3422
4	16.8255	46.0439	10.4385
5	50.8580	43.2316	26.5491
6	53.3365	60.4385	46.6635
7	61.1535	64.1087	56.8160
8	70.9247	66.3489	63.6797
9	76.9781	67.9695	66.2536
10	83.1745	70.8294	68.5415
11	87.1783	73.4509	71.0200
12	89.6092	76.7874	73.8322
13	97.0448	82.6501	81.9828
14	98.9514	91.4681	91.2297
15	99.2374	97.1401	96.9495
16	99.7617	99.6187	99.5234
17	99.7617	99.8570	99.6663
18	100.0000	100.0000	100.0000
19	100.0000	100.0000	100.0000
20	100.0000	100.0000	100.0000

Table 3.21: Results for problem `forplan`

iter	Tapia	New	Inter
1	80.2376	61.0151	52.4838
2	84.8812	60.9071	50.1080
3	85.3132	59.0713	51.7279
4	70.1944	80.1296	67.7106
5	61.4471	79.2657	61.4471
6	69.1145	81.7495	68.3585
7	71.9222	83.5853	70.1944
8	73.8661	79.8056	72.8942
9	79.5896	80.1296	78.0778
10	78.8337	80.4536	77.6458
11	79.9136	80.6695	77.3218
12	81.5335	80.7775	77.1058
13	84.8812	80.7775	77.6458
14	86.3931	80.6695	77.4298
15	89.3089	80.7775	78.2937
16	92.3326	81.4255	80.2376
17	98.5961	86.2851	86.0691
18	99.5680	97.5162	97.4082
19	99.8920	99.2441	99.2441
20	100.0000	100.0000	100.0000
21	100.0000	100.0000	100.0000
22	100.0000	100.0000	100.0000

Table 3.22: Results for problem `ganges`

iter	Tapia	New	Inter
1	46.7405	91.5254	40.1565
2	46.0235	91.4928	38.4615
3	44.5241	90.0587	39.7001
4	47.6532	81.8123	46.1538
5	63.5593	82.5293	63.5593
6	82.5945	90.2216	82.5945
7	79.7588	90.7106	78.1943
8	76.9557	91.2647	75.7497
9	78.4550	90.8735	75.9778
10	85.0065	90.6780	80.5085
11	90.6128	89.0808	84.5828
12	93.0248	85.8214	85.2021
13	94.1982	89.8305	89.7001
14	94.5567	93.8722	93.8396
15	94.9153	93.8722	93.8722
16	97.7184	93.9700	93.9700
17	99.2503	94.7523	94.7523
18	100.0000	99.9348	99.9348
19	100.0000	100.0000	100.0000

Table 3.23: Results for problem `gfrd-pnc`

iter	TAPIA	NEW	INTER
1	58.6101	59.3094	54.5017
2	59.8339	58.9598	55.5944
3	61.3199	58.3479	57.5612
4	59.3531	61.9318	59.3531
5	55.1573	62.4126	54.7203
6	54.8077	62.7622	52.3164
7	56.0752	63.2867	50.9178
8	72.7273	63.1993	51.2675
9	62.0192	63.3304	44.6678
10	60.7517	63.2867	43.0070
11	68.0944	63.2430	44.4930
12	71.6346	63.2867	44.2745
13	79.4580	63.3741	50.1311
14	84.1783	63.8112	55.1573
15	91.2150	63.7238	59.0035
16	95.2360	63.3741	61.7133
17	97.2465	63.3741	63.0245
18	99.9563	67.7010	67.7010
19	100.0000	100.0000	100.0000
20	100.0000	100.0000	100.0000

Table 3.24: Results for problem `israel`

iter	TAPIA	NEW	INTER
1	33.5443	37.3418	19.9367
2	30.0633	27.5316	13.2911
3	18.3544	28.4810	9.1772
4	20.2532	30.3797	12.0253
5	21.5190	38.6076	17.0886
6	15.1899	31.3291	6.9620
7	40.1899	45.8861	27.5316
8	30.0633	46.8354	22.4684
9	31.0127	47.4684	21.5190
10	23.1013	53.4810	14.2405
11	44.9367	56.9620	37.6582
12	50.0000	61.7089	42.4051
13	56.3291	63.2911	47.4684
14	56.9620	64.5570	44.9367
15	61.0759	66.7722	47.4684
16	75.0000	68.9873	57.5949
17	86.0759	67.7215	59.1772
18	95.8861	69.9367	67.4051
19	98.4177	83.5443	82.9114
20	99.6835	89.8734	89.8734
21	97.4684	94.3038	91.7722
22	100.0000	100.0000	100.0000

Table 3.25: Results for problem `kb2`

iter	TAPIA	NEW	INTER
1	66.1765	43.3824	43.3824
2	61.0294	54.4118	52.2059
3	60.2941	56.6176	51.4706
4	72.0588	82.3529	69.8529
5	77.2059	83.0882	72.7941
6	79.4118	81.6176	73.5294
7	80.1471	83.8235	77.9412
8	83.0882	86.0294	80.8824
9	82.3529	86.0294	78.6765
10	82.3529	86.0294	77.9412
11	87.5000	86.0294	78.6765
12	92.6471	87.5000	83.0882
13	97.7941	98.5294	97.0588
14	100.0000	100.0000	100.0000
15	100.0000	100.0000	100.0000
16	100.0000	100.0000	100.0000

Table 3.26: Results for problem `modszk1`

iter	TAPIA	NEW	INTER
1	4.0074	7.5832	3.6375
2	13.9951	11.9605	11.8989
3	36.8064	31.9975	31.5660
4	37.9778	35.9433	26.2639
5	43.2799	37.3613	16.5845
6	50.8015	39.3342	14.2417
7	53.9457	41.8002	14.8582
8	56.5351	45.4377	15.0432
9	56.4735	55.1171	15.1048
10	59.0629	62.0222	22.0715
11	59.4328	67.9408	30.5795
12	59.4945	78.8533	40.5672
13	89.7041	87.2996	78.5450
14	96.2392	90.7522	88.7793
15	95.5610	92.4168	90.3206
16	94.0814	93.0949	90.1973
17	95.1295	95.4994	92.9100
18	96.9174	96.9174	94.9445
19	99.2602	98.0271	97.7189
20	99.7534	98.7053	98.5203
21	100.0000	99.8150	99.8150
22	100.0000	100.0000	100.0000
23	100.0000	100.0000	100.0000
24	100.0000	100.0000	100.0000

Table 3.27: Results for problem `pilot`

iter	Tapia	New	Inter
1	60.1138	45.1900	42.9139
2	60.1997	45.4262	42.9246
3	62.2504	45.5980	41.0028
4	62.3041	46.6287	40.4445
5	58.1705	47.4232	43.7513
6	56.8606	48.5506	45.5443
7	56.6566	50.8804	48.6043
8	58.7717	52.5768	50.6012
9	58.3423	54.1336	51.5246
10	59.5985	54.6489	52.2976
11	60.2104	56.2809	53.8544
12	62.5725	56.7103	54.8636
13	63.5817	56.9573	54.7455
14	64.0112	57.8699	55.8192
15	63.8609	58.0631	55.3253
16	63.8072	58.3423	55.3897
17	64.6017	58.7395	55.6259
18	66.9208	58.7825	55.7226
19	69.7230	58.9865	55.8407
20	68.7782	59.3086	56.2272
21	69.7445	60.1138	57.0646
22	74.9839	61.1338	58.6644
23	85.2051	61.7135	59.9420
24	85.9996	61.8961	60.1353
25	88.9521	62.6047	60.7151
26	93.5903	63.1308	61.9283
27	93.3004	64.7412	63.5173
28	96.8864	70.2061	69.6908
29	98.6794	74.6511	74.2968
30	99.4095	81.3829	81.1145
31	99.7853	90.1331	90.1009
32	99.9034	96.4677	96.4462
33	99.7101	98.2070	97.9601
34	99.9034	99.0015	98.9263
35	99.9248	99.1411	99.0767
36	99.9356	99.2377	99.1840
37	99.9785	99.6135	99.5920
38	100.0000	99.9356	99.9356
39	100.0000	100.0000	100.0000

Table 3.28: Results for problem `pilot4`

iter	Tapia	New	Inter
1	61.9778	71.6113	53.2822
2	62.0205	70.2472	53.2822
3	62.2336	67.3487	52.5575
4	61.1679	65.3879	51.8755
5	64.8338	65.2174	58.3546
6	65.0895	67.9454	61.5090
7	65.2174	69.7783	64.6633
8	62.5320	71.3555	62.2762
9	61.7647	72.0375	61.0827
10	63.2566	72.6769	61.3811
11	66.1125	72.7195	62.7025
12	69.0537	73.0605	64.1944
13	71.2702	73.6573	66.1978
14	73.9557	73.8704	67.6044
15	76.4280	73.9983	68.9258
16	80.6053	74.4672	70.4177
17	83.2481	74.9787	72.1228
18	85.5499	75.3623	73.4015
19	88.6189	75.8312	74.3819
20	91.4322	76.5558	75.1918
21	93.7340	77.3657	76.5985
22	93.9898	78.6019	77.8772
23	95.2259	81.6283	81.1594
24	98.0818	82.9923	82.5661
25	98.8491	85.2089	84.7826
26	99.7442	86.0188	85.8909
27	99.6164	87.4680	87.2549
28	99.7869	94.7570	94.5439
29	99.9147	99.8721	99.7869
30	100.0000	100.0000	100.0000

Table 3.29: Results for problem `pilotnov`

iter	Tapia	New	Inter
1	54.2150	96.9447	51.8733
2	53.0107	96.6771	50.4460
3	54.9955	88.1802	52.4755
4	54.3488	75.2230	52.2525
5	55.4416	71.2087	53.6798
6	56.0660	70.2275	54.7725
7	56.7128	70.4282	55.4416
8	58.5638	71.4318	56.8466
9	60.3702	72.1231	58.1178
10	59.5897	72.6806	57.9839
11	61.9982	73.9072	60.0357
12	64.5629	75.1784	61.6414
13	67.0161	76.1151	63.4255
14	75.6244	76.7618	69.2016
15	87.6227	79.6833	78.4567
16	97.3907	82.7832	82.7832
17	98.3051	95.4059	95.4059
18	98.7065	97.6806	97.5691
19	99.8216	98.4389	98.4389
20	100.0000	100.0000	100.0000

Table 3.30: Results for problem `recipe`

iter	Tapia	New	Inter
1	53.6723	31.6384	31.6384
2	57.0621	42.0904	42.0904
3	57.9096	60.7345	53.6723
4	90.1130	82.7684	82.7684
5	93.2203	88.9831	88.9831
6	91.5254	92.0904	90.1130
7	96.0452	93.2203	92.0904
8	99.1525	93.2203	93.2203
9	100.0000	100.0000	100.0000
10	100.0000	100.0000	100.0000

Table 3.31: Results for problem `sc105`

iter	Tapia	New	Inter
1	22.0859	56.4417	18.4049
2	26.3804	58.2822	23.9264
3	57.0552	57.0552	57.0552
4	34.3558	57.0552	31.2883
5	39.8773	57.0552	32.5153
6	77.9141	57.0552	53.3742
7	91.4110	57.0552	53.3742
8	98.1595	69.3252	68.7117
9	100.0000	100.0000	100.0000
10	100.0000	100.0000	100.0000

Table 3.32: Results for problem `sc205`

iter	Tapia	New	Inter
1	22.0820	60.2524	19.5584
2	30.5994	60.5678	29.3375
3	60.8833	60.8833	60.8833
4	60.2524	60.8833	59.6215
5	67.8233	60.8833	53.9432
6	70.9779	60.8833	50.1577
7	64.6688	60.8833	39.1167
8	82.9653	60.8833	44.7950
9	94.0063	60.8833	60.5678
10	100.0000	74.4479	74.4479
11	100.0000	100.0000	100.0000
12	100.0000	100.0000	100.0000
13	100.0000	100.0000	100.0000

Table 3.33: Results for problem `sc50a`

iter	Tapia	New	Inter
1	16.8831	58.4416	11.6883
2	9.0909	59.7403	9.0909
3	58.4416	58.4416	58.4416
4	40.2597	58.4416	31.1688
5	62.3377	58.4416	49.3506
6	61.0390	58.4416	53.2468
7	84.4156	58.4416	57.1429
8	97.4026	92.2078	90.9091
9	100.0000	100.0000	100.0000
10	100.0000	100.0000	100.0000

Table 3.34: Results for problem `sc50b`

iter	Tapia	New	Inter
1	19.7368	63.1579	11.8421
2	25.0000	63.1579	25.0000
3	63.1579	63.1579	63.1579
4	59.2105	63.1579	46.0526
5	76.3158	63.1579	63.1579
6	92.1053	67.1053	65.7895
7	100.0000	100.0000	100.0000
8	100.0000	100.0000	100.0000

Table 3.35: Results for problem `scagr25`

iter	TAPIA	NEW	INTER
1	26.3785	7.8987	7.7496
2	38.1520	18.9270	15.0522
3	55.8867	37.1088	33.3830
4	61.1028	48.2861	44.1133
5	63.0402	59.4635	54.6945
6	65.1267	64.3815	58.8674
7	70.0447	69.5976	61.4009
8	77.1982	76.3040	70.6408
9	79.8808	83.0104	77.7943
10	81.2221	83.9046	78.9866
11	86.7362	83.1595	79.1356
12	91.2072	84.0537	80.0298
13	96.2742	87.9285	86.8852
14	98.0626	91.6542	91.2072
15	99.8510	97.1684	97.1684
16	100.0000	100.0000	100.0000

Table 3.36: Results for problem `scagr7`

iter	TAPIA	NEW	INTER
1	33.5135	10.8108	10.8108
2	42.7027	11.3514	5.9459
3	63.7838	52.9730	49.7297
4	63.7838	74.0541	62.1622
5	73.5135	84.3243	69.1892
6	86.4865	85.9459	82.1622
7	82.7027	90.2703	81.0811
8	89.7297	90.2703	82.1622
9	94.0541	91.8919	88.6486
10	96.2162	94.5946	93.5135
11	98.3784	98.9189	98.3784
12	100.0000	100.0000	100.0000
13	100.0000	100.0000	100.0000

Table 3.37: Results for problem `scfxm1`

iter	TAPIA	NEW	INTER
1	33.2770	50.3378	5.7432
2	35.8108	46.1149	5.4054
3	29.7297	36.6554	6.4189
4	23.8176	37.5000	13.0068
5	23.9865	46.2838	21.9595
6	29.3919	50.1689	26.8581
7	40.0338	49.3243	33.6149
8	39.6959	54.3919	34.6284
9	50.8446	58.2770	43.4122
10	53.5473	63.5135	47.2973
11	57.4324	64.1892	51.0135
12	65.5405	66.5541	55.0676
13	78.8851	67.3986	61.1486
14	90.3716	70.4392	67.5676
15	95.2703	78.2095	77.5338
16	99.4932	88.3446	88.0068
17	100.0000	99.8311	99.8311
18	100.0000	100.0000	100.0000

Table 3.38: Results for problem `scfxm2`

iter	TAPIA	NEW	INTER
1	33.1926	51.6892	6.1655
2	36.2331	42.3142	5.8277
3	30.9122	34.1216	6.5878
4	25.0000	35.3885	12.2466
5	24.2399	42.3142	20.6081
6	26.5203	56.0811	25.7601
7	42.9899	52.7872	35.4730
8	47.1284	53.1250	38.0068
9	50.0845	53.0405	38.2601
10	52.7872	58.1081	43.4966
11	57.7703	60.2196	47.2128
12	59.8818	64.2736	51.4358
13	67.8209	67.2297	55.9122
14	78.9696	67.7365	61.3176
15	90.3716	71.1149	68.9189
16	93.7500	78.2095	77.2804
17	98.6486	85.3885	84.8818
18	100.0000	99.3243	99.3243
19	100.0000	100.0000	100.0000
20	100.0000	100.0000	100.0000

Table 3.39: Results for problem `scfxm3`

iter	Tapia	New	Inter
1	33.2770	51.9707	6.3626
2	36.2050	37.6126	5.9685
3	30.4617	31.4189	6.8694
4	25.1126	34.3468	12.7815
5	24.8874	42.2297	21.5653
6	26.5766	56.6441	26.0135
7	43.1869	54.4482	35.6982
8	47.3536	51.5766	36.1486
9	47.5788	55.5743	37.2185
10	51.3514	54.3356	39.1329
11	53.9414	58.1644	43.8626
12	57.8266	60.0788	48.0856
13	58.7838	63.7950	51.5203
14	65.2027	65.5405	52.7027
15	75.4505	65.2027	58.3333
16	88.0631	68.9189	66.1036
17	93.9752	75.3378	74.2117
18	98.2545	83.5023	82.9955
19	99.7748	98.2545	98.1982
20	100.0000	100.0000	100.0000
21	100.0000	100.0000	100.0000

Table 3.40: Results for problem `scorpion`

iter	Tapia	New	Inter
1	24.5033	31.3466	16.9978
2	29.5806	36.6446	27.3731
3	13.9073	38.6313	13.9073
4	40.6181	41.2804	39.5143
5	35.5408	41.7219	32.6711
6	30.4636	41.2804	28.9183
7	47.0199	40.8389	30.9051
8	69.7572	40.6181	30.9051
9	80.1325	40.8389	33.3333
10	87.1965	44.1501	40.1766
11	95.5850	50.5519	49.6689
12	98.0132	67.9912	67.3289
13	99.7792	90.5077	90.2870
14	100.0000	100.0000	100.0000
15	100.0000	100.0000	100.0000

Table 3.41: Results for problem `scrs8`

iter	Tapia	New	Inter
1	62.9921	36.4567	35.2756
2	61.4173	57.7953	52.9921
3	56.9291	56.8504	49.3701
4	72.9921	67.0079	65.0394
5	47.2441	74.0945	43.7795
6	26.9291	76.2205	25.6693
7	15.7480	77.0866	10.5512
8	18.1890	78.5827	10.3937
9	21.0236	78.8189	10.7874
10	22.5197	78.0315	11.5748
11	22.7559	73.1496	10.4724
12	24.3307	54.4882	11.8898
13	29.3701	34.4882	16.2205
14	31.8110	33.7795	16.6142
15	37.2441	33.0709	21.8110
16	41.9685	32.2835	26.2205
17	57.7953	37.2441	33.3071
18	71.2598	38.8189	36.9291
19	82.7559	46.3780	45.5906
20	93.9370	57.9528	56.9291
21	98.5827	86.4567	86.1417
22	99.2913	98.2677	97.7953
23	100.0000	99.6063	99.6063
24	100.0000	100.0000	100.0000
25	100.0000	100.0000	100.0000

Table 3.42: Results for problem `scsd1`

iter	Tapia	New	Inter
1	3.9474	4.0789	3.9474
2	95.9211	65.3947	65.3947
3	87.8947	84.7368	80.1316
4	72.5000	87.7632	71.9737
5	61.8421	86.4474	60.7895
6	70.6579	87.5000	67.2368
7	79.6053	89.0789	75.0000
8	92.3684	95.1316	90.0000
9	100.0000	99.8684	99.8684
10	100.0000	100.0000	100.0000
11	100.0000	100.0000	100.0000

Table 3.43: Results for problem `scsd8`

iter	Tapia	New	Inter
1	20.0364	20.0364	20.0364
2	79.9636	0.0727	0.0000
3	77.2000	1.0182	0.0727
4	75.7091	7.9636	7.7091
5	75.6727	43.0182	40.1091
6	71.5273	71.4182	59.6727
7	72.1455	76.0364	59.9636
8	76.8727	80.4364	65.7091
9	94.1818	90.5455	85.0909
10	100.0000	100.0000	100.0000
11	100.0000	100.0000	100.0000
12	100.0000	100.0000	100.0000

Table 3.44: Results for problem `sctap1`

iter	Tapia	New	Inter
1	30.0000	33.7879	27.8788
2	24.3939	35.0000	23.4848
3	18.6364	40.4545	18.6364
4	8.1818	40.1515	8.1818
5	48.0303	40.6061	0.7576
6	41.9697	40.9091	2.7273
7	44.5455	41.6667	7.1212
8	50.4545	38.7879	13.9394
9	55.1515	39.0909	18.7879
10	59.2424	39.6970	23.0303
11	67.5758	45.4545	30.4545
12	89.8485	49.8485	45.4545
13	77.4242	59.5455	50.4545
14	83.9394	73.0303	65.7576
15	99.8485	97.4242	97.2727
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 3.45: Results for problem `sctap2`

iter	Tapia	New	Inter
1	27.9600	30.1200	20.6400
2	23.5600	32.7600	21.9200
3	18.2400	35.3200	18.2400
4	6.5600	38.3600	6.5600
5	30.3200	38.3600	0.2800
6	45.3200	38.3600	0.6800
7	38.7600	37.9200	0.7200
8	38.1600	32.5200	0.9600
9	51.6400	29.8800	9.5600
10	55.0400	29.0000	12.2000
11	62.1600	29.1200	16.5600
12	73.9200	31.6000	24.4800
13	81.8000	36.0000	32.6400
14	87.8000	37.8000	37.0000
15	88.8800	41.5600	41.1200
16	92.0400	68.9200	68.4800
17	97.6400	94.6000	93.3600
18	100.0000	100.0000	100.0000
19	100.0000	100.0000	100.0000

Table 3.46: Results for problem `sctap3`

iter	Tapia	New	Inter
1	27.5749	32.5749	21.2874
2	22.0060	34.0419	20.7186
3	15.8383	32.9641	15.8383
4	11.4072	37.4850	11.4072
5	27.4551	37.4850	0.0000
6	40.4790	37.4850	0.3892
7	40.5090	37.0659	0.4790
8	39.0419	31.4371	1.0479
9	49.2515	27.7844	6.6766
10	50.2994	26.6467	8.0539
11	57.9940	27.3054	12.8443
12	71.2575	29.9102	20.9581
13	81.1677	32.7545	28.7126
14	87.1856	36.4970	34.9102
15	89.8802	63.8323	63.5329
16	98.2335	92.7246	92.3952
17	100.0000	100.0000	100.0000
18	100.0000	100.0000	100.0000

Table 3.47: Results for problem `seba`

iter	Tapia	New	Inter
1	52.0753	52.3166	44.6911
2	48.0695	53.3301	41.9884
3	48.4556	54.0058	36.5830
4	46.5251	53.7162	38.3205
5	51.4479	55.2124	40.1062
6	52.5579	57.9151	42.2297
7	54.1988	59.7973	42.8571
8	57.5290	67.2297	49.3243
9	68.0019	70.7046	56.0811
10	75.3861	71.1873	64.7201
11	74.8069	71.3803	65.1062
12	75.8687	71.7181	67.0367
13	77.7992	71.9595	68.5811
14	77.7992	73.8417	70.8977
15	78.4749	75.4826	73.3591
16	84.0734	78.1371	76.7857
17	98.1178	79.0058	78.8127
18	99.9517	86.3417	86.3417
19	100.0000	97.6351	97.6351
20	100.0000	100.0000	100.0000
21	100.0000	100.0000	100.0000

Table 3.48: Results for problem `share1b`

iter	Tapia	New	Inter
1	43.1452	44.7581	8.0645
2	37.9032	44.7581	10.8871
3	20.9677	45.1613	14.1129
4	20.5645	45.5645	16.5323
5	20.9677	41.1290	20.1613
6	43.1452	44.3548	41.5323
7	43.5484	43.9516	40.7258
8	45.5645	44.3548	43.1452
9	40.7258	45.5645	38.3065
10	39.9194	45.5645	36.6935
11	52.0161	45.5645	39.9194
12	54.8387	50.4032	45.5645
13	58.8710	51.6129	48.7903
14	57.2581	50.8065	47.1774
15	60.4839	50.4032	48.3871
16	71.3710	50.4032	46.3710
17	67.7419	50.8065	47.9839
18	89.5161	55.6452	52.8226
19	97.9839	72.5806	71.7742
20	100.0000	95.5645	95.5645
21	100.0000	100.0000	100.0000

Table 3.49: Results for problem `share2b`

iter	Tapia	New	Inter
1	29.0123	37.0370	8.0247
2	29.0123	33.9506	10.4938
3	23.4568	36.4198	10.4938
4	25.3086	43.8272	19.7531
5	33.3333	54.3210	27.7778
6	37.6543	61.1111	35.8025
7	58.6420	69.1358	48.7654
8	73.4568	74.0741	64.8148
9	83.9506	81.4815	77.7778
10	89.5062	83.9506	82.7160
11	87.6543	89.5062	83.9506
12	100.0000	100.0000	100.0000
13	100.0000	100.0000	100.0000

Table 3.50: Results for problem `shell`

iter	Tapia	New	Inter
1	73.8063	61.6005	50.6052
2	72.3941	56.2878	50.2354
3	71.4190	54.9428	49.5965
4	69.3679	56.4560	51.2777
5	61.5669	68.4600	58.4734
6	63.0800	69.0652	57.6328
7	63.1473	70.1412	57.1284
8	61.6342	72.5622	54.3376
9	64.3241	75.8238	57.2293
10	67.7202	82.3134	62.3067
11	76.4627	81.0693	67.8547
12	83.5239	78.4465	68.4600
13	85.2724	78.7492	70.1748
14	87.8615	81.1365	73.2347
15	94.5528	85.0034	81.8763
16	94.2838	89.8453	85.5414
17	99.0585	95.9314	95.5615
18	99.5965	100.0000	99.5965
19	100.0000	100.0000	100.0000

Table 3.51: Results for problem `ship04l`

iter	TAPIA	NEW	INTER
1	75.0231	85.8927	75.0231
2	71.0916	84.7826	70.9066
3	37.9278	86.2165	37.0028
4	25.2544	86.3552	20.3053
5	28.8159	86.9103	20.9528
6	36.3552	87.8816	26.5957
7	52.1739	88.5291	42.0444
8	68.8252	87.5578	57.4931
9	82.8400	87.8353	71.6004
10	94.9121	89.7317	85.0601
11	99.8150	96.4847	96.3460
12	100.0000	100.0000	100.0000
13	100.0000	100.0000	100.0000

Table 3.52: Results for problem `ship04s`

iter	TAPIA	NEW	INTER
1	67.8218	83.9463	67.7511
2	62.8006	81.6832	62.4470
3	39.7454	83.9463	39.0382
4	24.1867	84.5827	17.7511
5	29.4908	85.5728	20.4385
6	39.3918	85.8557	27.8642
7	48.5856	86.2093	36.9873
8	62.0226	85.6436	49.7878
9	85.5021	85.9972	73.3380
10	93.2107	88.6139	83.2390
11	98.7270	94.9081	94.5545
12	99.7878	99.8586	99.7878
13	100.0000	100.0000	100.0000
14	100.0000	100.0000	100.0000
15	100.0000	100.0000	100.0000

Table 3.53: Results for problem `ship08l`

iter	TAPIA	NEW	INTER
1	78.2438	88.9145	78.2438
2	75.7548	88.8914	75.5704
3	44.1807	88.8914	43.6506
4	41.0002	89.0297	38.6725
5	41.5534	89.2141	36.8057
6	42.7057	89.4446	36.9670
7	47.2920	90.3434	41.3229
8	52.6850	90.5278	44.9643
9	65.1302	90.4817	56.2111
10	71.3298	90.4356	62.3646
11	77.9442	89.5368	68.5642
12	95.7363	89.8594	86.1258
13	99.2855	92.1641	91.7493
14	99.7465	95.0219	94.8375
15	99.9770	100.0000	99.9770
16	100.0000	100.0000	100.0000

Table 3.54: Results for problem `ship08s`

iter	TAPIA	NEW	INTER
1	66.0986	86.8263	66.0986
2	60.8015	86.2736	60.4330
3	44.4956	86.2736	43.7126
4	42.9756	86.9185	40.0276
5	44.9562	88.2543	40.9949
6	46.8908	89.0373	40.8567
7	54.2146	89.3137	45.9696
8	62.9664	89.1755	54.0304
9	74.0673	88.7609	64.6246
10	86.8724	88.4846	76.8770
11	96.6375	89.3137	86.6421
12	99.5854	93.1368	92.9986
13	100.0000	100.0000	100.0000

Table 3.55: Results for problem `ship12l`

iter	Tapia	New	Inter
1	75.8491	88.2154	75.8491
2	71.5331	87.9715	71.0452
3	40.0826	87.8777	39.8011
4	24.6951	87.9715	21.2235
5	28.6545	88.0841	23.6442
6	32.5014	88.3280	26.3276
7	36.1231	88.0841	28.1666
8	38.9191	88.1216	29.8180
9	46.8193	88.1028	37.2115
10	65.3781	88.5157	55.9392
11	81.6664	87.5211	71.0452
12	91.1803	88.3843	80.8407
13	98.5175	91.4243	90.2796
14	99.8499	96.3783	96.3032
15	99.9812	100.0000	99.9812
16	100.0000	100.0000	100.0000

Table 3.56: Results for problem `ship12s`

iter	Tapia	New	Inter
1	51.6790	84.4745	51.6354
2	51.6354	83.7331	50.1090
3	22.6341	83.6023	21.9363
4	18.2294	83.7331	16.7466
5	32.0105	84.6053	26.8644
6	36.8949	85.3031	29.6555
7	39.7732	85.3031	30.5277
8	40.5146	85.3903	30.6585
9	41.9538	85.9573	31.6616
10	54.0776	86.5678	43.7418
11	79.0667	85.0850	67.6406
12	88.8792	85.4775	76.9734
13	96.2058	88.8356	85.8700
14	98.9533	92.8914	92.2809
15	99.8692	98.5608	98.4300
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 3.57: Results for problem `stair`

iter	Tapia	New	Inter
1	61.2454	83.5502	56.9703
2	62.0818	82.2491	56.9703
3	60.4089	77.0446	54.0892
4	61.4312	66.9145	53.2528
5	64.4052	71.7472	62.0818
6	79.6468	78.0669	76.6729
7	80.4833	79.7398	77.8810
8	77.7881	80.2974	76.3011
9	77.6022	80.7621	76.1152
10	82.9926	81.1338	77.8810
11	88.4758	81.7844	78.1599
12	96.1896	84.9442	83.1784
13	98.7918	92.7509	91.9145
14	99.7212	100.0000	99.7212
15	100.0000	100.0000	100.0000
16	100.0000	100.0000	100.0000

Table 3.58: Results for problem `standata`

iter	Tapia	New	Inter
1	70.0715	45.8665	45.8665
2	79.4913	46.1844	46.1844
3	54.8092	46.6216	46.1049
4	50.0000	46.8203	46.2639
5	50.4769	48.5294	47.7742
6	50.4372	50.2782	48.0922
7	59.7377	51.6296	48.0525
8	60.5326	54.7695	51.8680
9	63.7917	59.3800	56.0016
10	66.7329	68.8792	58.5851
11	69.7138	75.3577	61.1288
12	81.1606	82.3529	73.5692
13	91.5342	89.6264	85.6121
14	99.8013	98.8871	98.6884
15	100.0000	100.0000	100.0000
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 3.59: Results for problem `standgub`

iter	Tapia	New	Inter
1	69.6925	46.1933	46.1933
2	79.5754	46.4861	46.4861
3	58.3821	47.8770	47.4012
4	53.9531	48.1698	47.6574
5	54.3924	50.7321	50.1098
6	54.3192	53.8799	52.0864
7	62.8111	60.5783	52.1230
8	64.1654	61.7130	58.7482
9	68.7408	70.4978	62.1157
10	70.6808	74.5608	62.7745
11	75.5490	80.3807	68.3748
12	87.4451	83.6018	79.1362
13	92.0571	88.1772	85.0293
14	99.1947	97.1449	96.5593
15	100.0000	100.0000	100.0000
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 3.60: Results for problem `standmps`

iter	Tapia	New	Inter
1	69.6741	45.8665	45.8665
2	79.0541	46.1447	46.1447
3	68.7202	52.4245	51.8283
4	68.1240	68.4420	64.0302
5	71.2242	75.0000	67.7266
6	65.3418	77.0270	60.9300
7	63.6725	77.8617	59.3005
8	60.6518	79.5707	53.6963
9	59.3800	78.7361	50.1192
10	61.3672	82.2734	52.4245
11	62.8776	83.3466	53.5771
12	61.8442	82.5119	53.4181
13	67.0111	84.4595	57.3529
14	65.1431	84.4595	54.8490
15	63.9905	85.0556	54.5707
16	76.0731	85.4134	64.4674
17	74.2448	85.8108	64.3084
18	98.6884	90.7393	90.1431
19	93.0048	94.3561	88.2353
20	94.1574	95.5485	90.7790
21	97.1781	99.1256	96.5421
22	97.1781	100.0000	97.1781
23	100.0000	100.0000	100.0000
24	100.0000	100.0000	100.0000

Table 3.61: Results for problem `stocfor1`

iter	Tapia	New	Inter
1	22.2930	26.7516	19.1083
2	30.5732	29.2994	21.0191
3	28.6624	35.6688	22.9299
4	46.4968	43.3121	24.8408
5	48.4076	43.3121	18.4713
6	60.5096	63.6943	33.7580
7	69.4268	68.1529	38.2166
8	71.3376	68.1529	40.7643
9	68.7898	68.7898	39.4904
10	70.0637	68.7898	42.0382
11	71.3376	73.2484	46.4968
12	70.0637	73.2484	48.4076
13	77.0701	73.2484	52.2293
14	83.4395	76.4331	59.8726
15	96.8153	89.1720	85.9873
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 3.62: Results for problem `stocfor2`

iter	Tapia	New	Inter
1	17.9639	0.0000	0.0000
2	21.1823	0.0328	0.0328
3	22.9885	2.5616	2.5616
4	26.1412	7.9803	7.5534
5	32.3153	10.8703	9.5567
6	42.5944	11.6256	10.1806
7	51.9540	13.1363	11.1330
8	56.1576	16.5846	13.4647
9	52.5123	17.9967	11.4614
10	51.2644	22.7586	10.8703
11	53.7931	33.5304	20.8539
12	57.8325	37.6355	26.6010
13	60.8539	46.1084	37.2085
14	68.8013	55.3366	45.9770
15	76.1905	57.8325	49.6552
16	79.4089	61.9704	53.9573
17	81.7077	59.6716	55.5665
18	87.3892	63.9080	61.8391
19	92.1182	73.6289	72.1839
20	97.4384	90.0821	88.8342
21	99.9343	100.0000	99.9343
22	100.0000	100.0000	100.0000
23	100.0000	100.0000	100.0000
24	100.0000	100.0000	100.0000

Table 3.63: Results for problem `tuff`

iter	TAPIA	NEW	INTER
1	77.8768	51.5397	50.6483
2	78.7682	51.7828	51.4587
3	78.9303	52.8363	52.5122
4	76.4182	54.0519	53.2415
5	65.3971	54.6191	53.8898
6	62.4797	55.2674	54.2950
7	62.2366	56.3209	55.7536
8	61.2642	60.8590	58.9141
9	66.2885	64.1815	63.8574
10	68.4765	67.2609	67.2609
11	66.5316	67.6661	65.6402
12	62.9660	68.0713	61.9125
13	62.1556	68.0713	57.9417
14	63.7763	68.1524	59.4003
15	67.5851	68.3955	62.3177
16	69.8541	68.4765	62.1556
17	77.7958	68.4765	66.0454
18	85.2512	68.4765	66.5316
19	92.6256	68.4765	67.5851
20	98.7034	69.2869	68.3144
21	99.7569	81.5235	81.4425
22	99.7569	97.4068	97.1637
23	100.0000	100.0000	100.0000

Table 3.64: Results for problem `wood1p`

iter	TAPIA	NEW	INTER
1	81.6185	0.0000	0.0000
2	98.4971	0.0000	0.0000
3	85.3565	0.5010	0.5010
4	86.2428	91.5607	85.8960
5	49.5568	88.7476	49.2871
6	36.9942	76.7630	36.5318
7	32.7553	68.7091	31.8690
8	33.7958	66.3969	31.9461
9	34.1426	63.4682	31.6763
10	34.0655	53.7572	30.7514
11	36.5318	52.2158	30.7514
12	36.6474	51.8304	30.8285
13	39.9615	51.8690	31.2909
14	44.5087	52.2543	31.9075
15	61.4258	59.4990	40.3468
16	87.4759	70.3276	64.6243
17	97.1484	93.2563	90.9441
18	99.0751	99.4220	98.4971
19	99.9229	100.0000	99.9229
20	100.0000	100.0000	100.0000
21	100.0000	100.0000	100.0000
22	100.0000	100.0000	100.0000

4. Globally Correctly Identified Indices

Table 4.1: Results for problem `25fv47`

iter	Tapia	New	Inter
1	1.1327	11.4887	1.1327
2	1.5642	13.6462	1.5642
3	1.8339	15.1564	1.8339
4	2.2654	17.0982	2.2654
5	3.0205	21.4671	3.0205
6	8.4682	27.5081	8.4142
7	17.6915	30.4746	13.9159
8	19.7950	33.8188	16.3430
9	21.4132	35.0593	17.5836
10	23.4628	36.2460	19.0399
11	25.2427	37.5405	20.4423
12	27.1305	38.2956	22.1143
13	30.2050	38.6192	23.4088
14	37.5405	40.2373	27.9396
15	45.7929	40.6149	30.2050
16	54.4768	40.9385	32.2006
17	59.9245	42.1791	34.0885
18	71.3053	43.4196	38.1338
19	77.8857	43.9590	39.9137
20	87.4865	46.6559	43.8511
21	93.2578	55.5016	53.8296
22	98.0043	65.9655	65.5340
23	99.2988	80.5286	80.3128
24	100.0000	98.7055	98.7055
25	100.0000	100.0000	100.0000

Table 4.2: Results for problem `adlittle`

iter	Tapia	New	Inter
1	2.1898	25.5474	0
2	4.3796	32.1168	1.4599
3	17.5182	37.2263	5.1095
4	28.4672	45.9854	10.2190
5	37.9562	55.4745	24.8175
6	45.9854	64.9635	35.7664
7	63.5036	77.3723	56.9343
8	77.3723	81.0219	71.5328
9	84.6715	87.5912	81.0219
10	92.7007	97.0803	91.9708
11	100.0000	100.0000	100.0000
12	100.0000	100.0000	100.0000

Table 4.3: Results for problem `afiro`

iter	Tapia	New	Inter
1	5.8824	41.1765	5.8824
2	9.8039	45.0980	9.8039
3	27.4510	45.0980	27.4510
4	78.4314	49.0196	33.3333
5	92.1569	68.6275	60.7843
6	100.0000	100.0000	100.0000
7	100.0000	100.0000	100.0000
8	100.0000	100.0000	100.0000

Table 4.4: Results for problem `agg`

iter	Tapia	New	Inter
1	6.3415	18.8618	0.9756
2	8.4553	18.8618	1.4634
3	14.6341	18.8618	3.9024
4	18.2114	19.8374	6.3415
5	24.8780	22.2764	12.3577
6	28.6179	28.2927	16.7480
7	38.3740	41.6260	28.7805
8	59.8374	45.0407	37.7236
9	71.7073	58.2114	51.0569
10	83.2520	76.5854	70.0813
11	87.8049	83.9024	78.0488
12	88.7805	86.3415	80.9756
13	91.0569	93.0081	88.4553
14	93.9837	93.8211	89.5935
15	95.7724	95.9350	92.6829
16	98.0488	96.0976	94.6341
17	99.3496	98.2114	97.7236
18	100.0000	99.1870	99.1870
19	100.0000	100.0000	100.0000

Table 4.5: Results for problem `agg2`

iter	Tapia	New	Inter
1	0.7916	15.5673	0.7916
2	0.9235	15.5673	0.7916
3	9.8945	22.2955	4.8813
4	14.9077	27.4406	9.6306
5	20.9763	33.6412	14.5119
6	35.3562	42.7441	28.4960
7	68.7335	52.7704	44.9868
8	73.3509	70.0528	62.6649
9	77.3087	71.8997	64.6438
10	82.1900	81.0026	75.8575
11	87.3351	82.0580	79.8153
12	92.2164	83.7731	82.0580
13	96.4380	84.1689	83.5092
14	99.2084	84.6966	84.6966
15	99.7361	88.7863	88.7863
16	100.0000	99.7361	99.7361
17	100.0000	100.0000	100.0000

Table 4.6: Results for problem `agg3`

iter	Tapia	New	Inter
1	0.7916	12.5330	0.7916
2	0.9235	12.5330	0.7916
3	13.1926	23.7467	8.4433
4	17.4142	26.7810	11.0818
5	29.0237	43.7995	22.5594
6	52.7704	54.2216	41.5567
7	71.5040	68.9974	60.1583
8	76.7810	73.0871	64.3799
9	80.7388	74.2744	68.0739
10	86.6755	81.0026	78.4960
11	90.3694	84.4327	82.7177
12	95.3826	84.4327	83.5092
13	98.4169	85.2243	85.2243
14	99.0765	85.2243	85.2243
15	99.8681	91.6887	91.6887
16	100.0000	100.0000	100.0000

Table 4.7: Results for problem `bandm`

iter	Tapia	New	Inter
1	0.4587	23.1651	0.0000
2	1.3761	25.0000	0.2294
3	2.2936	29.3578	1.1468
4	5.2752	33.0275	4.8165
5	17.2018	38.5321	16.2844
6	32.5688	42.8899	26.3761
7	43.5780	46.1009	30.5046
8	47.4771	51.8349	36.0092
9	50.9174	56.4220	41.5138
10	59.1743	59.6330	47.2477
11	74.0826	63.3028	54.1284
12	80.0459	66.2844	58.7156
13	86.4679	73.3945	67.6606
14	91.0550	78.2110	73.1651
15	97.2477	92.6606	90.3670
16	99.7706	99.0826	98.8532
17	100.0000	100.0000	100.0000

Table 4.8: Results for problem `beaconfd`

iter	Tapia	New	Inter
1	21.4815	23.7037	2.5926
2	25.1852	43.7037	23.3333
3	46.2963	54.4444	37.7778
4	58.1481	55.9259	47.0370
5	65.1852	62.9630	54.0741
6	70.0000	69.2593	64.0741
7	75.5556	72.2222	70.0000
8	78.1481	72.2222	70.3704
9	86.6667	72.2222	70.3704
10	92.2222	76.6667	75.5556
11	97.7778	77.4074	76.6667
12	100.0000	84.4444	84.4444
13	100.0000	100.0000	100.0000

Table 4.9: Results for problem `blend`

iter	Tapia	New	Inter
1	0.0000	20.1754	0.0000
2	0.0000	21.0526	0.0000
3	3.5088	26.3158	0.0000
4	7.8947	33.3333	3.5088
5	44.7368	45.6140	29.8246
6	50.0000	55.2632	37.7193
7	61.4035	59.6491	47.3684
8	75.4386	66.6667	59.6491
9	88.5965	72.8070	69.2982
10	98.2456	97.3684	96.4912
11	100.0000	100.0000	100.0000
12	100.0000	100.0000	100.0000

Table 4.10: Results for problem `bnl2`

iter	TAPIA	NEW	INTER
1	8.1490	19.5711	7.4492
2	8.8939	19.9549	7.9458
3	10.4740	20.2483	9.3679
4	10.9707	20.5192	9.8420
5	11.4447	21.8962	10.9029
6	12.2348	23.1151	12.0316
7	12.7765	24.1309	12.7540
8	14.2889	24.6953	14.0181
9	15.7788	25.2370	14.7856
10	17.4944	26.5237	15.3047
11	18.8713	28.2393	16.5011
12	20.5643	29.2551	17.5395
13	22.7088	29.9774	18.4876
14	28.6682	31.5124	19.7968
15	35.9142	32.3251	20.6321
16	36.7269	33.2506	21.6027
17	38.3747	33.9503	22.4831
18	40.2709	34.6953	24.0181
19	44.1309	35.1467	26.0948
20	46.9300	36.0722	28.0813
21	50.9932	36.6817	29.5937
22	54.1535	38.0813	31.1061
23	65.2596	39.2551	33.7698
24	70.6546	41.8284	36.6140
25	82.7765	43.9729	40.2709
26	86.2302	47.5169	44.7178
27	92.9345	57.3589	54.8984
28	95.3499	64.3792	62.2122
29	97.2009	75.1242	73.4537
30	98.9165	82.9345	82.4379
31	99.5260	93.7698	93.4312
32	99.9323	98.1490	98.1038
33	100.0000	100.0000	100.0000

Table 4.11: Results for problem `boeing1`

iter	TAPIA	NEW	INTER
1	34.0028	47.0222	33.7950
2	34.5568	47.2992	34.2798
3	34.9030	48.6150	34.6260
4	35.5263	51.1773	35.1108
5	36.5651	54.7784	36.2188
6	42.2438	61.0803	41.8975
7	50.8310	61.9114	49.2382
8	51.6620	62.5346	49.7922
9	52.9086	63.9889	50.8310
10	55.4017	66.6205	52.9778
11	63.2271	67.1053	54.0166
12	66.0665	68.3518	57.0637
13	70.2216	70.5679	60.6648
14	75.4848	70.8449	62.6731
15	80.7479	72.2992	65.8587
16	86.7729	72.7147	68.2825
17	91.7590	73.8920	71.0526
18	95.2909	79.7784	78.0471
19	98.6150	90.0277	89.8199
20	99.7922	96.0526	95.9834
21	100.0000	99.4460	99.4460
22	100.0000	100.0000	100.0000

Table 4.12: Results for problem `boeing2`

iter	TAPIA	NEW	INTER
1	37.8136	55.1971	37.0968
2	37.8136	55.1971	37.0968
3	37.9928	55.1971	37.0968
4	37.9928	55.3763	37.0968
5	40.3226	57.5269	39.2473
6	44.4444	60.3943	43.1900
7	47.1326	62.9032	46.5950
8	49.2832	64.6953	48.5663
9	53.4050	68.1004	52.1505
10	59.8566	71.3262	58.2437
11	61.4695	72.7599	60.5735
12	64.6953	73.1183	61.1111
13	70.7885	73.6559	63.6201
14	81.5412	73.8351	69.1756
15	94.8029	75.0896	72.4014
16	98.3871	82.6165	81.5412
17	99.6416	98.5663	98.2079
18	100.0000	100.0000	100.0000
19	100.0000	100.0000	100.0000

Table 4.13: Results for problem `bore3d`

iter	TAPIA	NEW	INTER
1	55.1667	64.8333	53.5000
2	57.0000	69.3333	55.3333
3	58.0000	71.8333	57.6667
4	58.8333	72.0000	58.5000
5	60.0000	74.5000	59.8333
6	62.0000	75.8333	60.6667
7	66.6667	77.1667	63.3333
8	75.8333	79.0000	69.3333
9	80.8333	80.3333	72.8333
10	83.3333	83.8333	78.1667
11	90.0000	84.5000	79.3333
12	91.5000	86.0000	81.5000
13	94.0000	87.5000	84.3333
14	97.8333	95.5000	94.6667
15	99.0000	98.3333	97.8333
16	100.0000	98.6667	98.6667
17	100.0000	100.0000	100.0000
18	100.0000	100.0000	100.0000

Table 4.14: Results for problem `brandy`

iter	TAPIA	NEW	INTER
1	11.5830	26.6409	4.6332
2	13.8996	26.6409	6.5637
3	15.8301	28.5714	7.7220
4	17.3745	32.8185	9.2664
5	24.7104	49.8069	24.3243
6	44.7876	54.4402	40.9266
7	49.0347	58.3012	44.4015
8	53.6680	60.6178	48.6486
9	57.9151	61.7761	52.1236
10	62.5483	64.0927	54.4402
11	73.7452	66.0232	58.6873
12	84.9421	72.2008	67.1815
13	88.8031	74.1313	71.4286
14	92.2780	77.6062	76.0618
15	99.6139	91.5058	91.1197
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 4.15: Results for problem `capri`

iter	TAPIA	NEW	INTER
1	40.2311	52.4160	39.2857
2	41.2815	52.4160	40.2311
3	42.0168	52.4160	40.9664
4	43.1723	52.5210	42.0168
5	45.5882	52.8361	44.2227
6	48.7395	55.1471	47.3739
7	49.0546	58.2983	47.8992
8	56.9328	59.0336	53.3613
9	58.8235	61.7647	55.1471
10	67.5420	65.7563	58.8235
11	75.2101	72.4790	66.2815
12	82.0378	76.6807	71.9538
13	86.4496	81.5126	78.3613
14	90.4412	84.8739	82.3529
15	94.1176	91.4916	88.7605
16	98.0042	97.4790	95.6933
17	99.7899	99.7899	99.6849
18	100.0000	100.0000	100.0000
19	100.0000	100.0000	100.0000
20	100.0000	100.0000	100.0000

Table 4.16: Results for problem `czprob`

iter	Tapia	New	Inter
1	8.4686	38.9048	8.4686
2	8.5005	38.9048	8.4686
3	10.7927	41.4836	10.7609
4	10.9519	41.8656	10.9519
5	12.4483	42.7252	11.8115
6	14.7087	43.7440	12.4164
7	18.5291	44.5718	13.3079
8	22.0312	46.6094	14.8360
9	24.5145	48.5833	16.3961
10	25.9790	51.0029	18.2108
11	28.9717	53.7727	21.2989
12	32.3464	55.8421	24.8965
13	37.2493	55.9376	28.0484
14	38.7138	58.0388	30.5635
15	42.0248	59.3123	34.1293
16	46.5775	60.3948	38.1726
17	49.0290	61.2862	40.8469
18	52.3400	61.7319	43.6167
19	52.8812	62.4642	44.6991
20	56.5743	62.6234	47.2779
21	58.1662	62.8462	48.2330
22	65.0430	63.0372	50.3025
23	66.5393	63.0372	51.0984
24	78.7966	63.0372	56.1923
25	82.7443	64.9793	59.4078
26	90.4171	67.8446	63.8332
27	94.9061	80.2611	76.7908
28	96.4661	95.1289	92.2954
29	97.5167	97.0710	94.9379
30	99.7135	99.4269	99.2677
31	100.0000	100.0000	100.0000
32	100.0000	100.0000	100.0000

Table 4.17: Results for problem `d6cube`

iter	Tapia	New	Inter
1	0.0000	0.0000	0.0000
2	0.0000	0.0000	0.0000
3	0.0485	3.1371	0.0000
4	0.1455	13.7937	0.0000
5	0.2264	15.7988	0.0000
6	0.4851	15.8959	0.0647
7	1.0188	15.9444	0.1132
8	1.2937	16.0252	0.1617
9	2.0375	16.0899	0.1779
10	2.8461	16.1869	0.2102
11	4.2529	16.2516	0.2264
12	6.4521	16.6721	0.2587
13	9.2497	17.4644	0.3396
14	12.3060	18.3053	0.7439
15	20.8118	21.1999	1.3098
16	25.4043	27.6358	2.7814
17	43.2891	34.5569	10.8344
18	66.9308	56.4683	40.0550
19	80.7083	70.4237	60.6889
20	94.1785	84.1041	82.6488
21	98.2859	97.3965	96.4101
22	99.4664	99.8545	99.3532
23	99.9838	100.0000	99.9838
24	100.0000	100.0000	100.0000
25	100.0000	100.0000	100.0000

Table 4.18: Results for problem `degen2`

iter	Tapia	New	Inter
1	5.5482	31.4399	5.2840
2	18.8904	40.0264	18.8904
3	19.0225	40.0264	18.8904
4	28.7979	40.5548	22.9855
5	51.6513	40.8190	29.7226
6	56.6711	41.6116	32.8930
7	60.5020	43.5931	35.1387
8	67.1070	47.0277	39.6301
9	73.8441	49.5376	43.9894
10	78.7318	76.6182	72.7873
11	88.5073	85.9974	85.3369
12	93.3950	94.7160	91.1493
13	99.3395	99.2074	98.5469
14	100.0000	100.0000	100.0000
15	100.0000	100.0000	100.0000

Table 4.19: Results for problem `e226`

iter	Tapia	New	Inter
1	2.3454	8.1023	0.2132
2	4.4776	11.9403	1.7058
3	5.3305	22.8145	4.2644
4	6.1834	27.0789	5.9701
5	6.6098	27.9318	6.3966
6	11.9403	28.7846	9.3817
7	22.1748	30.7036	12.5800
8	30.2772	30.9168	14.0725
9	33.0490	34.3284	17.4840
10	39.4456	37.1002	22.8145
11	43.9232	40.2985	26.6525
12	50.1066	44.3497	33.9019
13	53.9446	46.0554	36.6738
14	60.7676	49.4670	42.8571
15	68.6567	55.2239	50.9595
16	78.4648	56.9296	54.7974
17	85.9275	64.1791	61.1940
18	90.6183	75.9062	73.5608
19	92.1109	89.9787	85.2878
20	99.1471	93.3902	92.9638
21	99.3603	99.3603	98.7207
22	99.5736	100.0000	99.5736
23	100.0000	100.0000	100.0000

Table 4.20: Results for problem `fit1d`

iter	Tapia	New	Inter
1	1.1439	13.0124	1.1439
2	2.7169	18.6368	2.7169
3	7.5786	19.5424	7.3403
4	15.5863	21.2107	9.1992
5	48.9037	38.1316	26.0724
6	51.9066	57.6740	45.6625
7	59.8189	63.1554	56.0057
8	69.8284	65.5386	62.8694
9	75.6911	67.9218	65.5386
10	81.9828	70.8294	67.9695
11	85.8913	73.4509	70.4957
12	88.8465	76.7874	73.4986
13	96.7588	82.6501	81.8398
14	98.5701	91.4681	91.0391
15	99.1420	97.1401	96.8541
16	99.6663	99.6187	99.4280
17	99.7617	99.8570	99.6663
18	100.0000	100.0000	100.0000
19	100.0000	100.0000	100.0000
20	100.0000	100.0000	100.0000

Table 4.21: Results for problem `forplan`

iter	Tapia	New	Inter
1	51.2959	58.8553	50.0000
2	51.5119	58.8553	50.0000
3	53.2397	58.9633	51.6199
4	53.8877	71.7063	53.6717
5	54.5356	73.8661	54.5356
6	61.3391	76.3499	61.3391
7	70.3024	77.6458	68.6825
8	71.3823	79.1577	70.4104
9	75.9179	79.6976	74.6220
10	76.2419	80.2376	75.0540
11	78.1857	80.4536	75.7019
12	80.4536	80.5616	76.1339
13	84.2333	80.5616	77.2138
14	85.5292	80.6695	77.3218
15	89.2009	80.7775	78.2937
16	92.3326	81.4255	80.2376
17	98.4881	86.2851	86.0691
18	99.5680	97.5162	97.4082
19	99.8920	99.2441	99.2441
20	100.0000	100.0000	100.0000
21	100.0000	100.0000	100.0000
22	100.0000	100.0000	100.0000

Table 4.22: Results for problem `ganges`

iter	Tapia	New	Inter
1	38.1356	74.1851	38.1356
2	38.2660	74.2177	38.2660
3	39.6023	74.2503	39.6023
4	43.6767	74.5111	43.6767
5	53.0313	75.8801	53.0313
6	67.0143	83.9635	67.0143
7	72.9791	84.4850	71.5776
8	74.4785	84.9739	73.2725
9	77.1838	85.0717	74.7392
10	84.7458	85.3977	80.2803
11	90.6128	85.7236	84.5828
12	93.0248	85.7236	85.2021
13	94.1982	89.7979	89.7001
14	94.5567	93.8396	93.8396
15	94.9153	93.8722	93.8722
16	97.7184	93.9700	93.9700
17	99.2503	94.7523	94.7523
18	100.0000	99.9348	99.9348
19	100.0000	100.0000	100.0000

Table 4.23: Results for problem `gfrd-pnc`

iter	Tapia	New	Inter
1	39.2483	57.8234	38.7238
2	39.2483	57.9983	38.7238
3	39.2483	58.0857	38.8112
4	39.2483	61.3636	39.2483
5	39.2483	61.8881	39.2483
6	39.2483	62.2378	39.2483
7	40.4283	63.1993	40.3846
8	52.7098	63.1993	41.0839
9	52.7098	63.2430	41.1276
10	55.0262	63.2430	41.7832
11	61.6259	63.2430	42.2203
12	66.3462	63.2867	43.7063
13	76.6171	63.3741	50.0437
14	82.6923	63.3741	54.7640
15	90.1224	63.3741	58.6538
16	95.1049	63.3741	61.7133
17	97.2465	63.3741	63.0245
18	99.9563	67.7010	67.7010
19	100.0000	100.0000	100.0000
20	100.0000	100.0000	100.0000

Table 4.24: Results for problem `israel`

iter	Tapia	New	Inter
1	0.0000	24.6835	0.0000
2	0.3165	25.0000	0.3165
3	0.3165	27.5316	0.3165
4	1.5823	29.7468	0.9494
5	2.5316	30.0633	0.9494
6	3.7975	31.0127	1.2658
7	10.7595	45.5696	7.2785
8	11.0759	46.2025	7.5949
9	14.2405	47.1519	8.5443
10	14.5570	53.1646	9.1772
11	27.5316	56.3291	22.7848
12	33.2278	60.7595	26.8987
13	44.6203	62.3418	35.7595
14	50.0000	63.6076	37.9747
15	56.3291	65.8228	43.0380
16	73.1013	67.4051	55.3797
17	85.7595	67.4051	58.8608
18	93.6709	69.6203	67.4051
19	96.2025	83.5443	80.6962
20	97.1519	89.8734	87.3418
21	97.4684	94.3038	91.7722
22	100.0000	100.0000	100.0000

Table 4.25: Results for problem `kb2`

iter	Tapia	New	Inter
1	48.5294	43.3824	43.3824
2	48.5294	54.4118	48.5294
3	50.7353	56.6176	48.5294
4	58.8235	75.7353	56.6176
5	65.4412	78.6765	60.2941
6	66.9118	80.1471	61.7647
7	69.8529	83.8235	67.6471
8	74.2647	86.0294	72.0588
9	75.7353	86.0294	72.7941
10	77.9412	86.0294	74.2647
11	86.0294	86.0294	77.9412
12	91.9118	87.5000	82.3529
13	97.7941	98.5294	97.0588
14	100.0000	100.0000	100.0000
15	100.0000	100.0000	100.0000
16	100.0000	100.0000	100.0000

Table 4.26: Results for problem `modszk1`

iter	Tapia	New	Inter
1	0.0617	6.1036	0.0000
2	0.1850	10.4809	0.0000
3	0.6165	30.1480	0.1850
4	4.4390	34.2787	0.2466
5	15.2898	35.8200	0.4932
6	26.0789	37.7312	0.6782
7	33.5388	40.2589	2.2195
8	41.3687	44.0814	4.5623
9	48.7053	53.6991	13.5018
10	50.2466	60.7275	20.3453
11	52.5277	66.7078	27.7435
12	53.8224	77.5586	38.2244
13	83.6005	86.3132	75.6473
14	91.0604	89.8890	85.6350
15	91.8619	92.1702	87.5462
16	92.8483	93.0949	89.2109
17	94.5746	95.4994	92.5401
18	96.9174	96.9174	94.9445
19	99.2602	98.0271	97.7189
20	99.7534	98.7053	98.5203
21	100.0000	99.8150	99.8150
22	100.0000	100.0000	100.0000
23	100.0000	100.0000	100.0000
24	100.0000	100.0000	100.0000

Table 4.27: Results for problem `pilot`

iter	TAPIA	NEW	INTER
1	39.8325	43.8480	39.4460
2	39.9077	44.3526	39.5212
3	39.9936	44.9109	39.5963
4	40.4123	46.3603	39.9721
5	43.3863	47.1978	42.5918
6	45.0934	48.2929	44.0520
7	47.1333	49.9571	45.6839
8	50.2899	51.1488	46.8435
9	52.5231	52.4372	47.8312
10	53.9188	52.9848	48.4217
11	54.7241	54.5738	49.8282
12	56.4849	55.4434	50.8160
13	57.9772	55.7870	51.3099
14	58.5248	56.9358	52.3513
15	59.9635	57.3330	52.8130
16	60.5970	57.7518	53.2532
17	62.0356	58.3852	53.9296
18	64.6446	58.5570	54.3268
19	66.1048	58.8040	54.6167
20	66.9852	59.1368	55.0784
21	68.1125	59.9635	56.0125
22	73.2338	60.9513	57.6444
23	81.7909	61.5954	59.0616
24	84.6790	61.8102	59.5340
25	87.9107	62.5403	60.3607
26	90.9062	63.1093	61.4237
27	92.4844	64.7412	63.2703
28	96.3281	70.2061	69.3687
29	98.2822	74.6511	73.9961
30	99.0767	81.3829	80.8353
31	99.4846	90.1331	89.8003
32	99.6027	96.4677	96.1456
33	99.6457	98.2070	97.9064
34	99.8604	99.0015	98.8834
35	99.9248	99.1411	99.0767
36	99.9356	99.2377	99.1840
37	99.9785	99.6135	99.5920
38	100.0000	99.9356	99.9356
39	100.0000	100.0000	100.0000

Table 4.28: Results for problem `pilot4`

iter	TAPIA	NEW	INTER
1	45.9079	64.2796	45.7374
2	46.5899	64.2796	46.4194
3	47.6982	64.2796	47.5277
4	48.6360	64.2796	48.4655
5	53.3248	64.4928	53.1117
6	54.0494	66.7519	53.7937
7	55.9250	68.7980	55.8397
8	56.9480	70.0767	56.8627
9	57.9710	70.6735	57.6300
10	60.3581	71.2702	59.2924
11	62.3188	71.6965	60.4433
12	65.3026	72.0801	62.4041
13	67.2208	73.0605	64.1091
14	69.5226	73.4868	65.4731
15	72.5064	73.8278	67.1355
16	76.8116	74.3819	68.7980
17	79.9233	74.9361	70.8014
18	82.3103	75.3623	72.0375
19	86.7008	75.8312	73.4868
20	90.1961	76.5558	74.5098
21	92.0290	77.3657	76.0443
22	93.5209	78.6019	77.4084
23	94.6292	81.6283	80.6479
24	97.6982	82.9923	82.2251
25	98.5081	85.2089	84.4842
26	99.4032	86.0188	85.5925
27	99.5311	87.4680	87.1697
28	99.7869	94.7570	94.5439
29	99.9147	99.8721	99.7869
30	100.0000	100.0000	100.0000

Table 4.29: Results for problem `pilotnov`

iter	Tapia	New	Inter
1	45.0268	68.2426	44.2462
2	45.2944	68.2649	44.4915
3	47.2569	68.2649	46.4095
4	48.5727	68.4211	47.6360
5	50.0446	68.5103	48.9518
6	51.3158	68.8002	50.2230
7	51.7618	69.4246	50.6467
8	53.5236	70.6735	52.0071
9	56.3782	71.3872	54.4157
10	57.2257	72.5022	55.7315
11	59.5227	73.8849	57.9170
12	62.1543	75.1115	59.5674
13	65.9456	76.0482	62.7788
14	75.3791	76.7618	69.0455
15	87.4665	79.6833	78.3452
16	97.2569	82.7832	82.6717
17	98.1936	95.4059	95.2944
18	98.7065	97.6806	97.5691
19	99.8216	98.4389	98.4389
20	100.0000	100.0000	100.0000

Table 4.30: Results for problem `recipe`

iter	Tapia	New	Inter
1	46.0452	31.6384	31.6384
2	50.8475	42.0904	41.8079
3	57.3446	60.7345	53.6723
4	87.8531	82.7684	80.5085
5	90.9605	88.9831	86.7232
6	91.2429	92.0904	89.8305
7	96.0452	93.2203	92.0904
8	99.1525	93.2203	93.2203
9	100.0000	100.0000	100.0000
10	100.0000	100.0000	100.0000

Table 4.31: Results for problem `sc105`

iter	Tapia	New	Inter
1	7.9755	56.4417	7.3620
2	12.2699	56.4417	11.6564
3	31.2883	57.0552	31.2883
4	32.5153	57.0552	31.2883
5	39.2638	57.0552	32.5153
6	77.3006	57.0552	52.7607
7	90.7975	57.0552	53.3742
8	98.1595	69.3252	68.7117
9	100.0000	100.0000	100.0000
10	100.0000	100.0000	100.0000

Table 4.32: Results for problem `sc205`

iter	Tapia	New	Inter
1	9.4637	60.2524	8.8328
2	16.7192	60.2524	16.0883
3	35.0158	60.8833	35.0158
4	35.0158	60.8833	35.0158
5	45.7413	60.8833	35.0158
6	54.5741	60.8833	36.9085
7	59.6215	60.8833	37.5394
8	77.2871	60.8833	44.7950
9	94.0063	60.8833	60.5678
10	100.0000	74.4479	74.4479
11	100.0000	100.0000	100.0000
12	100.0000	100.0000	100.0000
13	100.0000	100.0000	100.0000

Table 4.33: Results for problem `sc50a`

iter	Tapia	New	Inter
1	3.8961	58.4416	3.8961
2	6.4935	58.4416	6.4935
3	31.1688	58.4416	31.1688
4	35.0649	58.4416	31.1688
5	54.5455	58.4416	48.0519
6	61.0390	58.4416	53.2468
7	83.1169	58.4416	57.1429
8	97.4026	92.2078	90.9091
9	100.0000	100.0000	100.0000
10	100.0000	100.0000	100.0000

Table 4.34: Results for problem `sc50b`

iter	Tapia	New	Inter
1	9.2105	63.1579	9.2105
2	21.0526	63.1579	21.0526
3	44.7368	63.1579	44.7368
4	56.5789	63.1579	44.7368
5	75.0000	63.1579	61.8421
6	92.1053	67.1053	65.7895
7	100.0000	100.0000	100.0000
8	100.0000	100.0000	100.0000

Table 4.35: Results for problem `scagr25`

iter	TAPIA	NEW	INTER
1	15.9463	6.1103	2.8316
2	29.3592	17.1386	11.6244
3	45.7526	34.1282	26.9747
4	51.4158	45.6036	36.8107
5	54.8435	57.6751	47.6900
6	58.4203	63.3383	53.2042
7	64.3815	68.5544	55.8867
8	72.1311	75.4098	65.5738
9	76.4531	81.9672	74.2176
10	78.2414	83.1595	75.8569
11	84.2027	83.1595	77.1982
12	89.5678	84.0537	79.5827
13	95.6781	87.9285	86.7362
14	98.0626	91.6542	91.2072
15	99.8510	97.1684	97.1684
16	100.0000	100.0000	100.0000

Table 4.36: Results for problem `scagr7`

iter	TAPIA	NEW	INTER
1	13.5135	5.9459	0.5405
2	22.7027	9.7297	0.5405
3	39.4595	52.9730	29.7297
4	48.6486	74.0541	47.0270
5	65.9459	83.7838	61.0811
6	78.9189	85.9459	74.5946
7	80.5405	90.2703	78.9189
8	87.5676	90.2703	82.1622
9	92.4324	91.8919	88.1081
10	95.6757	94.5946	92.9730
11	98.3784	98.9189	98.3784
12	100.0000	100.0000	100.0000
13	100.0000	100.0000	100.0000

Table 4.37: Results for problem `scfxm1`

iter	TAPIA	NEW	INTER
1	3.0405	32.0946	1.6892
2	4.0541	32.0946	2.7027
3	5.0676	32.4324	3.7162
4	8.1081	35.3041	7.0946
5	11.6554	40.0338	11.1486
6	20.2703	43.5811	18.0743
7	30.2365	45.1014	25.8446
8	33.1081	48.8176	28.7162
9	42.0608	54.7297	35.4730
10	47.4662	61.8243	41.5541
11	53.2095	63.8514	47.8041
12	62.6689	66.5541	52.7027
13	77.0270	67.3986	59.6284
14	89.6959	70.4392	67.2297
15	95.1014	78.2095	77.3649
16	99.4932	88.3446	88.0068
17	100.0000	99.8311	99.8311
18	100.0000	100.0000	100.0000

Table 4.38: Results for problem `scfxm2`

iter	TAPIA	NEW	INTER
1	2.7872	28.6318	1.6892
2	4.0541	28.6318	2.8716
3	4.6453	28.9696	3.4628
4	7.0101	32.1791	6.0811
5	10.3885	36.0642	9.6284
6	14.2736	42.6520	14.1047
7	33.1926	44.1723	26.9426
8	37.3311	46.5372	29.5608
9	42.5676	49.5777	32.2635
10	46.1993	55.8277	38.0068
11	52.1115	59.0372	43.0743
12	56.3345	63.7669	48.9020
13	65.0338	66.7230	54.3074
14	77.8716	67.6520	60.8108
15	89.5270	71.0304	68.7500
16	93.5811	78.2095	77.1959
17	98.6486	85.3885	84.8818
18	100.0000	99.3243	99.3243
19	100.0000	100.0000	100.0000
20	100.0000	100.0000	100.0000

Table 4.39: Results for problem `scfxm3`

iter	Tapia	New	Inter
1	2.6464	25.9009	1.6329
2	3.8288	25.9572	2.7590
3	4.3919	27.0833	3.3221
4	6.7005	30.9122	5.8559
5	10.0225	34.5721	9.4595
6	13.8514	41.1599	13.7950
7	32.0383	42.5676	25.6194
8	36.4865	43.6374	27.1959
9	38.0068	45.7770	29.4482
10	42.2297	48.7050	31.7568
11	45.8896	54.5608	37.6689
12	49.4369	58.1081	41.3288
13	53.7725	62.7252	47.8604
14	61.9369	64.5833	51.3514
15	74.2680	65.0901	57.8266
16	86.8806	68.8063	65.8221
17	93.8626	75.3378	74.2117
18	98.2545	83.5023	82.9955
19	99.7748	98.2545	98.1982
20	100.0000	100.0000	100.0000
21	100.0000	100.0000	100.0000

Table 4.40: Results for problem `scorpion`

iter	Tapia	New	Inter
1	7.7263	21.8543	7.7263
2	10.1545	21.8543	10.1545
3	10.3753	25.8278	10.3753
4	22.7373	38.4106	22.2958
5	24.7241	38.4106	22.7373
6	25.6071	39.2936	24.0618
7	43.0464	39.7351	27.8146
8	65.5629	39.9558	28.9183
9	79.2494	40.8389	32.4503
10	86.3135	44.1501	39.2936
11	95.5850	50.5519	49.6689
12	98.0132	67.9912	67.3289
13	99.7792	90.5077	90.2870
14	100.0000	100.0000	100.0000
15	100.0000	100.0000	100.0000

Table 4.41: Results for problem `scrs8`

iter	Tapia	New	Inter
1	4.2520	11.5748	1.7323
2	4.5669	12.8346	2.2047
3	4.6457	13.2283	2.2835
4	4.6457	17.8740	4.3307
5	6.3780	21.8110	4.8031
6	7.4016	24.2520	6.9291
7	10.0787	24.8819	7.3228
8	13.1496	26.2992	8.1890
9	15.2756	27.0079	8.7402
10	16.0630	27.5591	9.0551
11	17.0079	27.7953	9.2126
12	19.4488	28.3465	10.8661
13	23.3071	29.0551	13.4646
14	26.5354	29.3701	14.7244
15	34.1732	30.0787	20.7874
16	39.9213	32.2047	25.3543
17	55.5906	37.1654	32.5197
18	68.5827	38.8189	36.4567
19	81.4173	46.3780	44.7244
20	93.7008	57.9528	56.7717
21	98.1102	86.4567	85.9843
22	99.2913	98.2677	97.7953
23	100.0000	99.6063	99.6063
24	100.0000	100.0000	100.0000
25	100.0000	100.0000	100.0000

Table 4.42: Results for problem `scsd1`

iter	Tapia	New	Inter
1	0.0000	0.0000	0.0000
2	52.7632	62.6316	36.0526
3	52.7632	79.6053	48.5526
4	53.0263	84.8684	52.7632
5	56.7105	85.6579	55.9211
6	69.3421	87.2368	66.4474
7	78.4211	89.0789	74.4737
8	92.3684	95.1316	90.0000
9	100.0000	99.8684	99.8684
10	100.0000	100.0000	100.0000
11	100.0000	100.0000	100.0000

Table 4.43: Results for problem `scsd8`

iter	Tapia	New	Inter
1	0.0000	0.0727	0.0000
2	44.1455	0.0727	0.0000
3	44.2182	0.9455	0.0727
4	46.4727	7.7455	5.7455
5	50.2545	43.0182	26.9455
6	56.6909	70.1091	48.3273
7	66.1091	76.0364	56.9818
8	74.9818	80.4364	64.1091
9	94.1818	90.5455	85.0909
10	100.0000	100.0000	100.0000
11	100.0000	100.0000	100.0000
12	100.0000	100.0000	100.0000

Table 4.44: Results for problem `sctap1`

iter	Tapia	New	Inter
1	0.0000	26.0606	0.0000
2	0.0000	27.7273	0.0000
3	0.0000	31.5152	0.0000
4	0.0000	31.5152	0.0000
5	25.0000	31.9697	0.6061
6	27.2727	32.1212	1.6667
7	33.4848	33.9394	6.2121
8	42.2727	35.0000	12.4242
9	49.5455	37.1212	18.3333
10	54.6970	38.7879	22.2727
11	64.5455	44.8485	29.6970
12	74.5455	48.7879	38.6364
13	77.2727	59.5455	50.4545
14	83.9394	73.0303	65.7576
15	99.8485	97.4242	97.2727
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 4.45: Results for problem `sctap2`

iter	Tapia	New	Inter
1	0.0000	24.2000	0.0000
2	0.0000	25.5600	0.0000
3	0.0000	25.7600	0.0000
4	0.0000	27.6800	0.0000
5	16.8000	27.6800	0.0400
6	23.5200	27.6800	0.1200
7	25.3600	27.6800	0.2000
8	29.4800	27.6800	0.6800
9	44.6000	27.8800	7.5200
10	52.7200	28.2000	11.7200
11	60.6400	28.9200	16.0800
12	73.2800	31.4800	24.3200
13	81.6000	35.8400	32.5600
14	87.6000	37.7600	36.8800
15	88.8800	41.5600	41.1200
16	92.0400	68.9200	68.4800
17	97.6400	94.6000	93.3600
18	100.0000	100.0000	100.0000
19	100.0000	100.0000	100.0000

Table 4.46: Results for problem `sctap3`

iter	Tapia	New	Inter
1	0.0000	23.7126	0.0000
2	0.0000	24.4012	0.0000
3	0.0000	24.4611	0.0000
4	0.0000	25.4192	0.0000
5	13.0838	25.4192	0.0000
6	21.6168	25.4192	0.0000
7	26.7066	25.4192	0.0000
8	29.6707	25.4192	0.3293
9	40.4491	25.6886	4.9102
10	46.0778	26.0479	7.1856
11	56.4371	27.2754	12.4551
12	70.8383	29.8503	20.8982
13	80.7186	32.7545	28.5928
14	87.1557	36.4970	34.9102
15	89.8802	63.8323	63.5329
16	98.2335	92.7246	92.3952
17	100.0000	100.0000	100.0000
18	100.0000	100.0000	100.0000

Table 4.47: Results for problem `seba`

iter	Tapia	New	Inter
1	30.4537	35.2317	27.0753
2	31.6602	36.5347	28.5714
3	37.3069	38.1274	30.5985
4	40.2510	39.4788	33.1081
5	45.5116	41.1197	35.5695
6	47.3938	43.4363	38.0309
7	50.8205	45.0290	40.1062
8	54.6815	52.6544	47.7799
9	65.4923	59.7490	55.2606
10	72.8764	67.3263	62.9826
11	74.7104	69.4015	65.1062
12	75.8205	70.6081	66.9884
13	77.6544	70.9459	68.5328
14	77.7027	73.3591	70.8977
15	78.4749	75.3861	73.3591
16	84.0734	78.1371	76.7857
17	98.1178	79.0058	78.8127
18	99.9517	86.3417	86.3417
19	100.0000	97.6351	97.6351
20	100.0000	100.0000	100.0000
21	100.0000	100.0000	100.0000

Table 4.48: Results for problem `share1b`

iter	Tapia	New	Inter
1	0.8065	39.1129	0.8065
2	1.6129	39.5161	1.6129
3	5.6452	39.9194	5.6452
4	8.4677	39.9194	8.4677
5	12.5000	40.3226	12.5000
6	25.4032	43.9516	24.5968
7	27.4194	43.9516	25.4032
8	28.2258	44.3548	26.2097
9	28.6290	45.5645	27.4194
10	29.0323	45.5645	27.4194
11	42.7419	45.5645	31.8548
12	48.7903	50.4032	39.5161
13	52.0161	50.4032	41.9355
14	53.6290	50.4032	43.1452
15	57.2581	50.4032	45.1613
16	62.0968	50.4032	45.1613
17	66.9355	50.8065	47.1774
18	89.1129	55.6452	52.8226
19	97.9839	72.5806	71.7742
20	100.0000	95.5645	95.5645
21	100.0000	100.0000	100.0000

Table 4.49: Results for problem `share2b`

iter	Tapia	New	Inter
1	0.6173	32.0988	0.6173
2	1.8519	32.0988	1.8519
3	4.3210	35.1852	4.3210
4	7.4074	42.5926	6.7901
5	13.5802	52.4691	13.5802
6	23.4568	60.4938	21.6049
7	51.8519	69.1358	42.5926
8	67.2840	74.0741	59.2593
9	77.7778	81.4815	72.2222
10	83.9506	83.9506	77.1605
11	87.6543	89.5062	83.9506
12	100.0000	100.0000	100.0000
13	100.0000	100.0000	100.0000

Table 4.50: Results for problem `shell`

iter	Tapia	New	Inter
1	48.4196	53.5642	48.3860
2	48.4869	53.5642	48.4533
3	48.8568	53.7660	48.8231
4	49.6301	55.3127	49.4284
5	50.9079	64.4923	49.9328
6	54.2367	65.0639	51.0760
7	56.6577	66.6106	52.1520
8	59.2804	69.4015	53.2280
9	62.7774	72.9321	56.2206
10	66.5098	76.8662	60.7935
11	75.6557	77.5387	65.6691
12	82.9859	77.6059	68.1574
13	85.1379	78.7155	70.0740
14	87.8278	81.1365	73.2011
15	92.8379	85.0034	80.4304
16	94.2838	89.8453	85.5414
17	99.0585	95.9314	95.5615
18	99.5965	100.0000	99.5965
19	100.0000	100.0000	100.0000

Table 4.51: Results for problem `ship04l`

iter	TAPIA	NEW	INTER
1	8.9269	84.2738	8.9269
2	9.0194	84.3201	8.9732
3	15.2174	85.8002	14.3386
4	21.2766	86.0315	16.4662
5	27.5208	86.5865	19.7965
6	35.8002	87.4191	26.1332
7	52.0814	87.5116	41.3043
8	68.6864	87.5116	57.4468
9	82.7012	87.8353	71.5541
10	94.9121	89.7317	85.0601
11	99.8150	96.4847	96.3460
12	100.0000	100.0000	100.0000
13	100.0000	100.0000	100.0000

Table 4.52: Results for problem `ship04s`

iter	TAPIA	NEW	INTER
1	4.8798	80.6223	4.8798
2	5.0212	80.6931	4.9505
3	13.1542	83.5219	12.4470
4	21.2164	83.9463	15.4880
5	27.9349	84.7242	19.4484
6	38.6846	85.0778	27.2984
7	47.7369	85.6436	36.1386
8	62.0226	85.6436	49.7878
9	85.3607	85.9972	73.1966
10	93.1400	88.6139	83.1683
11	98.6563	94.9081	94.4837
12	99.7878	99.8586	99.7878
13	100.0000	100.0000	100.0000
14	100.0000	100.0000	100.0000
15	100.0000	100.0000	100.0000

Table 4.53: Results for problem `ship08l`

iter	TAPIA	NEW	INTER
1	25.6280	88.2692	25.6280
2	25.6741	88.2922	25.6511
3	30.3757	88.3614	29.9378
4	34.1784	88.5457	31.9659
5	38.9952	88.7071	34.7085
6	41.2998	88.9375	35.9530
7	46.0936	89.4907	40.1705
8	52.0627	89.4907	44.2037
9	64.6923	89.4907	55.6119
10	71.1454	89.4907	61.9267
11	77.9442	89.4907	68.5642
12	95.7363	89.8594	86.1258
13	99.1473	92.1641	91.6110
14	99.7234	95.0219	94.8375
15	99.9770	100.0000	99.9770
16	100.0000	100.0000	100.0000

Table 4.54: Results for problem `ship08s`

iter	TAPIA	NEW	INTER
1	20.6357	85.0760	20.6357
2	20.6357	85.1681	20.6357
3	30.8153	85.3524	30.2626
4	35.3293	85.9972	32.8420
5	41.0871	87.5633	37.6324
6	45.3247	88.2543	39.4749
7	52.9710	88.4846	44.9562
8	62.1373	88.4846	53.1092
9	73.7448	88.4846	64.2561
10	86.7342	88.4846	76.7849
11	96.6375	89.3137	86.6421
12	99.5854	93.1368	92.9986
13	100.0000	100.0000	100.0000
14	100.0000	100.0000	100.0000

Table 4.55: Results for problem `ship12l`

iter	TAPIA	NEW	INTER
1	18.1835	86.4703	18.1835
2	18.2586	86.4703	18.1835
3	19.0655	86.4703	18.8591
4	22.5746	86.6204	19.3657
5	26.9094	86.8268	22.1993
6	30.7187	87.0895	24.6575
7	35.0722	87.1083	27.3597
8	38.4500	87.2209	29.4239
9	46.4065	87.4085	36.8362
10	64.9278	87.5023	55.0572
11	81.4975	87.5023	70.9326
12	91.0490	88.3843	80.7469
13	98.5175	91.4243	90.2796
14	99.8499	96.3783	96.3032
15	99.9812	100.0000	99.9812
16	100.0000	100.0000	100.0000

Table 4.56: Results for problem `ship12s`

iter	TAPIA	NEW	INTER
1	8.1116	80.8112	8.1116
2	8.1989	80.8112	8.1116
3	8.8530	80.8984	8.5914
4	13.2141	81.4653	12.2547
5	25.9922	82.4248	21.2386
6	30.7457	83.2970	24.2477
7	35.7174	83.5587	27.1260
8	38.0288	83.9075	28.6960
9	41.2124	84.5181	31.0946
10	53.4235	84.9106	42.8696
11	78.7178	84.9106	67.3790
12	88.6175	85.3903	76.7990
13	95.7697	88.8356	85.4339
14	98.9533	92.8914	92.2809
15	99.8692	98.5608	98.4300
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 4.57: Results for problem `stair`

iter	TAPIA	NEW	INTER
1	51.5799	66.2639	51.5799
2	52.0446	66.2639	52.0446
3	52.1375	66.2639	52.1375
4	52.6952	66.8216	52.6952
5	60.8736	71.2825	60.8736
6	73.8848	77.3234	72.4907
7	74.9071	79.1822	73.4201
8	75.2788	79.8327	74.0706
9	76.2082	80.2974	74.8141
10	78.1599	81.1338	75.9294
11	86.9888	81.7844	77.4164
12	95.6320	84.9442	82.7138
13	98.5130	92.7509	91.9145
14	99.7212	100.0000	99.7212
15	100.0000	100.0000	100.0000
16	100.0000	100.0000	100.0000

Table 4.58: Results for problem `standata`

iter	TAPIA	NEW	INTER
1	46.1049	45.8665	45.8665
2	46.4229	46.0652	45.8665
3	46.6216	46.3037	45.8665
4	47.8537	46.4229	45.9459
5	48.0127	47.9730	46.6614
6	48.8076	49.4833	47.4960
7	58.3068	50.1192	47.6153
8	59.5390	54.3720	51.7886
9	62.6789	59.3005	55.9221
10	63.7122	68.7997	57.8696
11	68.9587	75.3577	61.0493
12	80.8029	82.3529	73.4897
13	91.5342	89.6264	85.6121
14	99.8013	98.8871	98.6884
15	100.0000	100.0000	100.0000
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 4.59: Results for problem `standgub`

iter	TAPIA	NEW	INTER
1	47.6208	46.1933	46.1933
2	49.1215	46.3763	46.1933
3	50.8419	47.5842	47.1816
4	51.9766	47.8038	47.3646
5	52.1596	50.3660	49.1581
6	52.9283	53.3675	51.6471
7	60.9444	54.7218	51.7936
8	62.5183	61.7130	58.0527
9	66.1420	70.4612	61.1274
10	69.3631	74.5242	62.7013
11	74.6706	80.3807	68.0820
12	87.0791	83.6018	79.0264
13	91.9839	88.1772	84.9561
14	99.1947	97.1449	96.5593
15	100.0000	100.0000	100.0000
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 4.60: Results for problem `standmps`

iter	TAPIA	NEW	INTER
1	46.3037	45.8665	45.8665
2	46.8601	46.1447	45.8665
3	47.3768	52.1463	46.1049
4	48.1717	67.7663	47.2178
5	49.0859	74.2051	47.3370
6	49.7615	75.9936	47.3370
7	50.2782	76.9873	48.0525
8	53.2591	77.5040	48.5294
9	56.4785	78.4976	49.6820
10	57.7901	80.0477	50.8744
11	58.5056	81.1208	51.4706
12	59.9364	81.9952	52.3052
13	61.5660	83.9030	53.1399
14	62.5994	84.0223	53.6169
15	62.8776	84.6184	54.0541
16	72.4563	84.9364	62.4801
17	73.3307	85.5326	63.7520
18	91.7727	90.1828	83.4261
19	92.4086	94.0382	87.7583
20	93.9984	95.5485	90.6200
21	96.3434	99.1256	95.7075
22	97.1781	100.0000	97.1781
23	100.0000	100.0000	100.0000
24	100.0000	100.0000	100.0000

Table 4.61: Results for problem `stocfor1`

iter	TAPIA	NEW	INTER
1	3.1847	23.5669	0.0000
2	6.3694	26.7516	3.1847
3	9.5541	33.1210	4.4586
4	31.2102	40.7643	11.4650
5	37.5796	40.7643	12.1019
6	56.6879	60.5096	30.5732
7	60.5096	64.3312	33.7580
8	61.1465	66.2420	35.6688
9	61.1465	66.8790	36.3057
10	63.0573	67.5159	38.8535
11	64.3312	71.9745	43.3121
12	68.1529	72.6115	46.4968
13	75.7962	73.2484	50.9554
14	83.4395	76.4331	59.8726
15	96.8153	89.1720	85.9873
16	100.0000	100.0000	100.0000
17	100.0000	100.0000	100.0000

Table 4.62: Results for problem `stocfor2`

iter	TAPIA	NEW	INTER
1	2.0690	0.0000	0.0000
2	7.3235	0.0328	0.0000
3	7.4548	2.3317	1.2808
4	12.9721	6.8309	4.4335
5	22.1018	9.5567	6.4696
6	28.7685	10.5419	7.4877
7	36.9458	11.2315	7.8161
8	43.9409	12.1839	8.1117
9	44.4992	12.6108	8.3087
10	46.6338	15.2381	10.5419
11	50.1149	25.7143	20.5583
12	54.6141	31.2315	26.3383
13	58.3908	42.4631	36.9787
14	66.2069	51.9212	45.1888
15	74.2200	55.3038	49.1954
16	77.8982	59.4417	53.8259
17	81.1823	59.5731	55.5665
18	87.2578	63.9080	61.8391
19	92.0854	73.6289	72.1839
20	97.4384	90.0821	88.8342
21	99.9343	100.0000	99.9343
22	100.0000	100.0000	100.0000
23	100.0000	100.0000	100.0000
24	100.0000	100.0000	100.0000

Table 4.63: Results for problem `tuff`

iter	TAPIA	NEW	INTER
1	49.5138	51.2966	48.7844
2	49.7569	51.6207	49.0276
3	49.8379	52.5932	49.1086
4	50.0000	53.8898	49.1086
5	50.1621	54.5381	49.1086
6	50.6483	55.1864	49.4327
7	51.6207	56.3209	49.9190
8	52.1070	60.2917	51.7828
9	55.3485	63.9384	54.2950
10	56.7261	67.0989	55.8347
11	57.0502	67.5041	56.1588
12	57.4554	67.9092	56.4019
13	58.9951	67.9092	56.4019
14	60.1297	67.9903	57.4554
15	64.1005	68.2334	60.1297
16	67.0989	68.3144	61.0211
17	76.5802	68.3144	65.0729
18	84.4408	68.3144	65.7212
19	92.3825	68.3144	67.3420
20	98.7034	69.1248	68.3144
21	99.7569	81.5235	81.4425
22	99.7569	97.4068	97.1637
23	100.0000	100.0000	100.0000

Table 4.64: Results for problem `wood1p`

iter	TAPIA	NEW	INTER
1	29.5954	0.0000	0.0000
2	29.5954	0.0000	0.0000
3	29.5954	0.0385	0.0000
4	29.9037	47.9383	29.8651
5	30.0578	47.9769	29.9037
6	30.8671	47.9769	30.5588
7	31.2139	48.0539	30.6358
8	31.8304	48.0925	30.6744
9	32.6397	48.0925	30.6744
10	33.1021	48.1310	30.7129
11	34.8362	48.3237	30.7129
12	35.9152	48.5549	30.7900
13	39.3834	49.4798	31.2524
14	43.8921	51.1368	31.9075
15	61.3487	58.7283	40.3468
16	87.3603	70.3276	64.5087
17	97.0713	93.2563	90.9056
18	99.0751	99.4220	98.4971
19	99.9229	100.0000	99.9229
20	100.0000	100.0000	100.0000
21	100.0000	100.0000	100.0000
22	100.0000	100.0000	100.0000

References

[1] F. Facchinei, A. Fischer and C. Kanzow: *On the identification of zero variables in an interior-point framework.* Mathematical Programming Technical Report 98–06, Computer Sciences Department, University of Wisconsin – Madison, Madison, WI, May 1998.